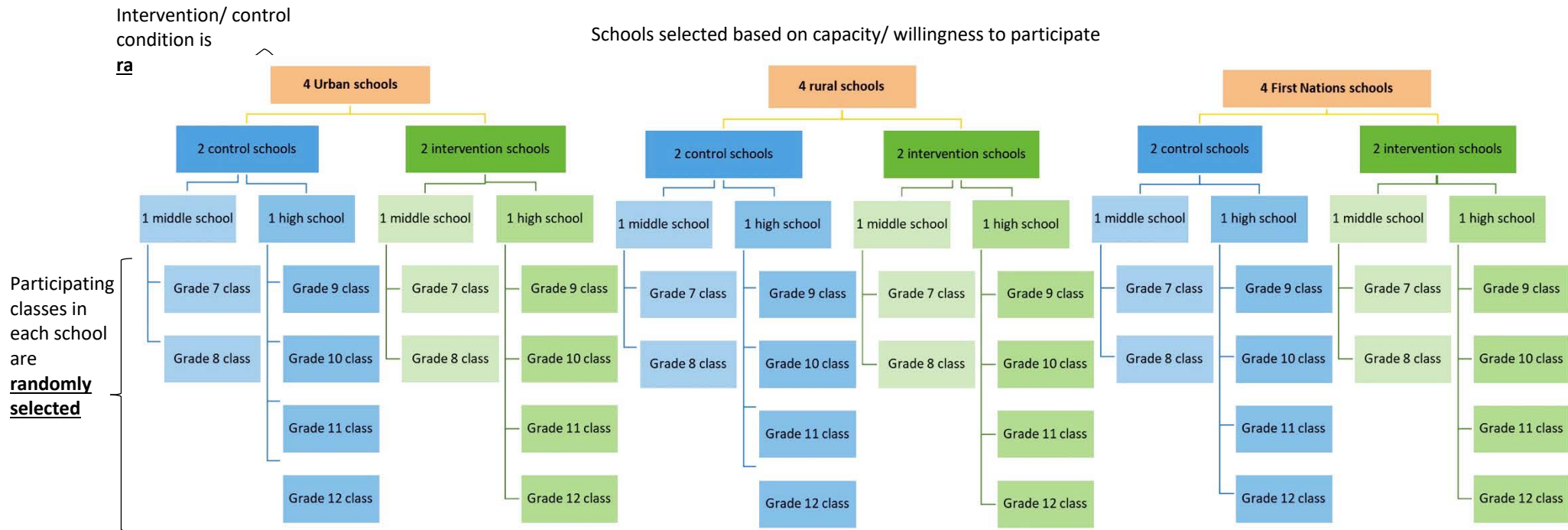


APPENDICES

FASD Prevention school-based program for children and adolescents in select urban, rural and First Nations schools in Ontario, Canada

Appendix A. Study Implementation Flow Diagram



Prevention of alcohol use in pregnancy and Fetal Alcohol Spectrum Disorder (FASD)



SLIDE 1

Welcome everyone to this course that will explore the risks associated with alcohol use in general and most specifically around the risks associated with alcohol use in general and during pregnancy, including fetal alcohol spectrum disorder, or FASD for short.

At the end of this course, you will have more information that will help you to make informed decisions and move forward and “live your best life”. This lesson plan will prepare you for decisions you will need to make regarding pregnancy and birth later in life, when you are older and ready to start a healthy, happy family.

Content disclaimer

- All concepts presented are based on the most up-to-date scientific information.
- This presentation includes information and imagery related to negative consequences of alcohol and substance use, in general and in pregnancy, including Fetal Alcohol Spectrum Disorder (FASD). This content may be sensitive for some.
- All students are expected to be respectful of others' ideas and differences. We must have a safe, inclusive, positive and comfortable space for all students.

SLIDE 2

We'd like to start by offering a brief disclaimer around the content of this presentation. All of the information and concepts presented in this material are based on the most up-to-date and scientific information.

- This presentation includes information and imagery related to some of the negative consequences resulting from alcohol and substance use in general and specifically in pregnancy. These discussions will focus on the risks associated with alcohol use in pregnancy and fetal alcohol spectrum disorder and it's really important to understand that this content may be sensitive to some. Therefore, it's really important for all of us to create a safe, inclusive and positive space that's comfortable for all and be respectful to other people's ideas and beliefs and understandings that we all come with.

Lesson plan outline

1. Impacts of alcohol use on teenage health
2. Impacts of alcohol use in pregnancy
3. What is Fetal Alcohol Spectrum Disorder (FASD)?
4. Supporting alcohol-free and drug-free pregnancies
 - a) Strategies to support others
 - b) Case-scenario activity
 - c) Student quiz

SLIDE 3

So we'll begin by providing you with a bit of an overview of what this Lesson plan will focus on. There are 3 units. In 1st Unit we'll start by discussing the impacts and risks associated with alcohol use on teenage health overall.

In Unit 2 We will speak specifically around the negative impacts of alcohol use during the pregnancy on the development of the fetus. We will talk about fetal alcohol spectrum disorder, or FASD.

In Unit 3 we will explore together ways that we can support alcohol and drug free pregnancies because we do believe that it's up to all of us to ensure that pregnancies are as healthy as they can be. We will be discussing strategies that we can support one another ... our peers ... our family members... Our partners.

At the end of the course there will be some case scenarios and activities as well as some group discussions that will help bring this information to life and of course there will be little quizzes to make sure that this information is resonating and that it's going to stick with us.

UNIT 1

Impacts of alcohol use on teen health



SLIDE 4

All right let's begin... In Unit 1 we will be talking about the impacts of alcohol use specifically on teen health.

Discussion question

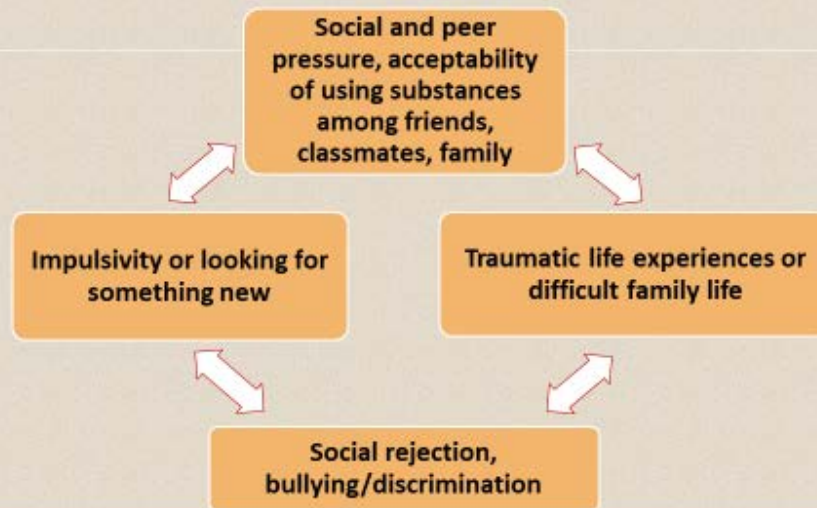
What might influence teenagers to use alcohol and/or other substances?



SLIDE 5

So, we'll start this unit with a discussion question circling around influences around alcohol use. Specifically, what might influence teenagers and young adults to use alcohol and or other substances?

Factors influencing alcohol/drug use in teens



SLIDE 6

Alcohol seems to be just about everywhere so some of the factors influencing alcohol and drug use in teenagers in particular are:

Social and peer pressure, as mentioned, alcohol seems to be everywhere in our society, so there is a general sense of acceptance that many people use it, This acceptability seems to filter through among friends, classmates and family members. So, there's commonly alcohol use within social circumstances, but some people think that alcohol and other substances may help them to cope with some distressing circumstances. For example some traumatic life experiences and difficult family life can lead people to use or misuse alcohol and other substances.... as can the feeling of social rejection - bullying and or discrimination of any kind for examples. Then there's also the fact that some of us are just a little more impulsive by nature and we're looking for something exciting or something new to do.

In summary, all of these factors influence each other. A teen might be looking for something new and might try a substance impulsively if presented the opportunity and this may be influenced by a family life or traumatic life experience and in some cases teens may use substances as just as a distraction or as an escape from these circumstances. In some cases, children have had a difficult family life also tend to experience feelings of isolation and that along with bullying and discrimination in school and other settings may lead to substance use and abuse. A teen may also start drinking alcohol or using other substances that they see their friends their family members or their classmates doing this especially, as we mentioned if it's at a party or in a social setting.

Discussion questions

1. Can you name some risks related to drinking alcohol?
2. Which organs/systems of the body can be negatively affected by alcohol?



SLIDE 7

Let's take some time to think about and discuss. We will be following up with some evidence and specific discussion points as we move along. This discussion is an opportunity for us to explore what we already know and provides us with an opportunity to explore what we need to learn more about.

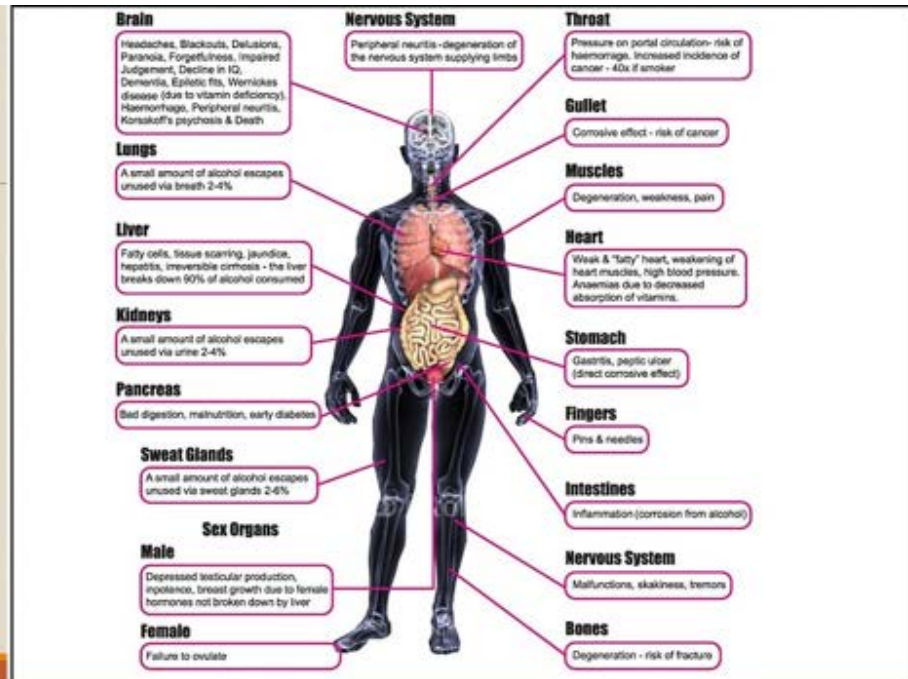


SLIDE 8

When we drink alcohol it's really important to understand that it really does negatively impact our mind our behavior and overall well-being. As a result, in many cases our safety and the safety of others can be compromised. Things like drowsiness, a headache, loss of consciousness for example with significant alcohol use. Memory mix-ups or lapses sometimes there is slurred speech..... lots of times there's vomiting associated with heavy alcohol use, and there's just this common distortion of our senses and our perception and how we see the world while under the influence. I.e., "he has his beer muscles on" or "they have liquid courage". Some people act quite differently while under the influence and often in ways that are not in line with their actual values.

There can be clumsiness and an unsteady way of walking and sometimes this really sneaks up on people quickly. For example, alcohol that really tastes good on a hot summer day for example may go down very quickly because it is refreshing... You may not realize how much you drank, and how quickly it has affected you until you go to stand up and your blood starts moving and going through your system. Accidents can and do happen during these times. These are the immediate and short-term effects of drinking alcohol that many of us are quite likely familiar with. Of course, where there is intoxication and alcohol poisoning all the effects are more severe and may require hospitalization and these can lead to very serious injuries. Some other possible consequences of alcohol in the short term may also include dangerous or impulsive behaviors such as fighting sexual risk behaviors such as unsafe sex or injuries or impaired driving.

Alcohol negatively affects ALL systems and organs of the human body



SLIDE 9

It's really important to understand that alcohol is a toxin that negatively affects all systems and organs of the human body and obviously the more alcohol is consumed, the higher the risk and the more damage that's being done. For example, as listed here, the brain is obviously affected. Often, and especially with heavy levels of alcohol use, there are headaches, blackouts, delusions, paranoia, memory loss and impaired judgment ... this affects our ability to act safely and wisely. These effects also go beyond just the period where you're under the influence. With long-term use of alcohol, and especially heavy use of alcohol, there can be early onset of dementia for example sometimes there's epileptic seizures; brain bleeds, etc. Our central and peripheral nervous systems are affected and as indicated in the slide there could be a degeneration of the nervous system supplying the limbs.

It is also well-known, that alcohol is a carcinogen, which means it can cause many types of cancer such as mouth, throat, breast and lung cancer. Alcohol use can make our muscles degenerate ... our heart can become weaker as it has more fat kind of lingering around it weakening the heart muscles. Alcohol can cause or lead to high blood pressure while the stomach can be at more risk of ulcers and inflammation in general. ... Our fingers and other extremities might experience a sensation of pins and needles that result from poorer circulation. We may experience some tremors and some shakiness, which is related to the idea that our bones can degenerate as alcohol eats away at the calcium and we can be at higher risk of fractures. For men and boys, there could be decreased testosterone production and impotence, as well as breast growth due to female hormones not broken down properly by the liver. Females, on the other hand, can have difficulty ovulating and having children. Alcohol can escape through our sweat glands and can lead to poor digestion and malnutrition and maybe even some early diabetes ... When our body breaks down alcohol, it forms a toxic

substance and this can travel straight out of us through our kidneys which definitely impacts the cells and the function there ... we know that livers are directly impacted by alcohol use because liver is filtration system. This means that, in the liver, there could be tissue scarring, jaundice, and irreversible alcoholic liver cirrhosis. It's the liver's job to breakdown 90% of the alcohol consumed so obviously the more alcohol you drink the more the liver can be compromised ... even small amounts of alcohol escapes through the breath and through our lungs so as you can see this is a whole-body experience ... the previous slide simply showed the short-term effects but alcohol effects your body far longer than just the period of which that you were under the influence or intoxicated. Alcohol negatively affects all systems and organs of the human body impacting your overall health and well-being.



ALCOHOL CONSUMPTION IS RESPONSIBLE FOR

+ than 200

diseases and injury conditions

The most common ones are:

- Mental and behavioural disorders
- Alcohol addiction
- Liver cirrhosis
- Cancers (mouth, throat, esophagus, liver, colon-rectum, breast in women)
- Cardiovascular diseases
- Injuries/death resulting from road traffic crashes, violence, and suicides (tend to occur in younger age groups)
- Fetal Alcohol Spectrum Disorder

SLIDE 10

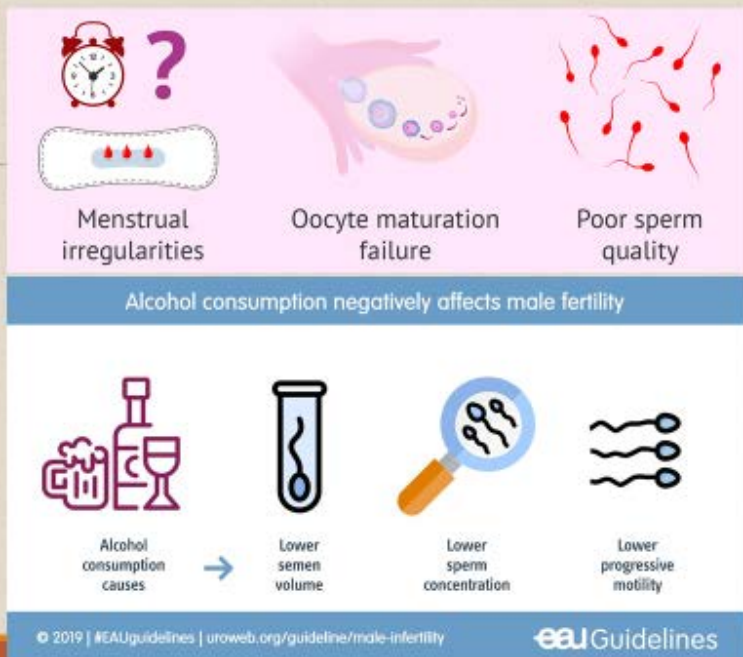
Alcohol consumption is responsible for a variety of different diseases and injuries, more than 200 in fact. Alcohol is frequently involved in incidents leading to the emergency room visits and hospitalizations.

The most common diseases and injuries associated with the use of alcohol are mental and behavioral disorders. Alcohol addiction, also known as alcohol use disorder ... Cirrhosis of the liver then a variety of cancers including mouth, throat, esophagus, liver, colon-rectum cancer. Even low to moderate levels of alcohol use can put women at an increased risk of breast cancer.

Alcohol use can also lead to cardiovascular diseases, as well as vehicular accidents (including cars, motorcycles and boats), violence, and suicides which tend to occur with younger age groups.

Alcohol use during pregnancy can cause Fetal alcohol spectrum disorder in the child – a chronic disability, which we will review in detail in the next Unit.

Alcohol can negatively impact the female and male reproductive systems



SLIDE 11

Alcohol can also quite negatively impact both the female and the male reproductive systems. For example, alcohol can create irregularities for our menstrual cycles and it can also lead to eggs failing to mature as they are supposed to. Alcohol can interfere with sperm production and quality and can negatively affect male fertility. Specifically, alcohol consumption causes lower seminal fluid volume as well as lower sperm concentration. They don't move as quickly and quite simply they're not as healthy as they could be. It's important to understand that the health of a baby begins even before the point of conception. And, of course, if/when you decide to become parents one day, all of you would want babies to begin as healthy as they can be.

Alcohol negatively affects **nutrition** and **muscular strength/endurance**



Alcohol is a toxin! It has little-to-no nutritional value and it DEPLETES energy instead of giving the body more energy.

- **Alcohol contributes to poor absorption of vitamins and minerals even when eating a healthy diet**
- **Causes dehydration (skin and body!)**
- **Can slow down your metabolism even if you are athletic**
- **Can prevent muscle recovery and can slow down "gains"**



SLIDE 12

It's really important to understand that alcohol interferes with all kinds of things that our bodies are trying to do. For example, it negatively affects nutrition in the way that our foods are processed, and it also interferes with our muscular strength, our energy levels and our physical/muscular endurance.

Simply put, Alcohol is a toxin it has very little or no nutritional value whatsoever and instead of giving the body anything positive it depletes energy levels and interferes with the way the body is trying to process and utilize the food and nutrients that we are consuming.

Alcohol leads to poor absorption of the valuable vitamins and minerals that we are consuming even when we do work really hard to eat a healthy diet. Alcohol leads to dehydration that affects our entire body and can be seen by looking closely at our skin.

Even if we are living an otherwise healthy lifestyle which includes exercise and spending time outside and eating properly, alcohol is known to slow down our metabolism which is counterproductive on many levels.

And finally, alcohol interferes with our ability to recover and so when we're injured or when we've spent time exercising and building muscles for example alcohol can prevent muscle recovery and slow down any of the muscle gains that we've made.

Alcohol is high in calories and stimulates appetite, which can lead to overeating and weight gain



HOW MANY CALORIES ARE YOU DRINKING?

A spirit and coke has similar calories to a **blueberry muffin**



A pina colada has similar calories to a **doughnut**



A glass of wine has similar calories to a **slice of cake**



A 50ml of liqueur has similar calories to **two sausages**



A pint of lager has similar calories to a **slice of pizza**



A frozen margarita has similar calories to a **cheeseburger**



SLIDE 13

We now know that alcohol has really little to no nutritional value whatsoever however it is really high in calories. In addition to the high calories, which can lead to weight gain and other compounding issues ... it can also stimulate our appetite which again doesn't help us towards our healthy lifestyle goals. Many of us will be surprised to know that:

- a glass of spirit and Coke so for example a Rye and Coke has similar calories to a blueberry muffin.
- A pina colada has similar number of calories to a glazed donut
- a glass of wine can have as many calories as a good size sliver of cake
- and 50 milliliters of a fancy liqueur has a similar number of calories as two sausages
- a pint of beer or ale has similar calories to a slice of pizza
- in a frozen Margarita is about the same as a full-on cheeseburger

For most people, indulging in one of these foods gives them more gratification than the drink equivalent you see pictured. Additionally, people who consume alcohol often choose to consume more than one drink, which is the equivalent of multiple cheeseburgers, for example. This goes to show that the calories from alcohol can add up very quickly, yet they don't benefit our nutrition at all. You can see how consuming alcohol on a regular basis would have negative long-term effects on your nutrition, and though it is of lesser importance, it may also affect your weight as well.

Alcohol use can also negatively affect your skin and appearance over time



SLIDE 14

It was mentioned previously that alcohol can dehydrate the skin and as seen by these pictures it can also impact the appearance of our skin quite noticeably as indicated in the pictures provided in this slide. Again, we should be focused on the important ways alcohol impacts our health in ways we don't see (for example, cancer risk), but we must also be aware of scientific evidence that suggests how alcohol can negatively affect our appearance as well.

Alcohol can speed up the aging process leading to more wrinkles, bags under the eyes in part due to interrupted sleep as well. Alcohol can lead to more fine lines, puffiness, and some saggy skin. It is really important to remember that alcohol is a toxin, so it does interfere with cell rejuvenation and our overall health. This slide provides some examples of what happens on the outside everybody that we're able to see and attribute to alcohol use, and it's important to remember the damage also takes place inside of her body that's less obvious, but in some cases more impactful.

Heavy alcohol use can negatively affect your **mouth and smile**



CANCER

Excessive alcohol is one of the main risk factors that can cause mouth cancer. Smoking and alcohol together greatly increases the risk.

Check for ulcers that have not healed within 3 weeks and unusual red or white patches.



EROSION

Alcohol especially mixed with fizzy drinks can lead to increased levels of acid in the mouth. This can lead to tooth erosion.



TRAUMA

Excessive alcohol consumption is one of the main risk factors in causing violent behaviour or domestic abuse. This can result in trauma to the face and teeth.

SLIDE 15

This slide provides us with some pretty graphic details around some of the more serious and negative impacts of heavy alcohol use. We talked about how alcohol can lead to various cancers in this slide shows us what cancer of the tongue would look like. Excessive alcohol use is one of the main risk factors that can cause mouth cancer in fact.

Naturally, combining alcohol use with smoking would increase this risk considerably – by several times! The dentist always checks our tongue for any kind of abnormalities but it's important for everyone to check for ulcers that have not healed within three weeks for example or unusual red or white patches especially if alcohol and cigarettes are a part of someone's lifestyle.

Alcohol is full of sugars and is often mixed with fizzy drinks in this combination naturally can increase our risk of tooth erosion..... There is an increased amount of acid that's more frequently found in our mouths with regular alcohol use.

Excessive alcohol consumption is one of the main risk factors relating to domestic abuse and violent behavior so this often results in trauma to the face and particularly to the mouth and teeth.

The effects of alcohol may be different from person to person

Some individual factors make you even **more susceptible** to negative impacts, including:



- Female gender
- Low body weight
- Pre-existing physical and mental health conditions
- Use of medications (e.g., anti-depressants)
- Young age (under 25)

SLIDE 16

It's important to remember that we are all different and the effects of alcohol use and misuse will be different from person to person. Because of this, you cannot really judge what you think is “safe” for you, based on what you’ve deemed is “safe” for someone else. Firstly, alcohol impacts all bodily systems in a negative way, but certain individual factors that make people even more susceptible to these negative impacts including;

1. simply by being born a female
2. having a low body weight to begin with, especially a low BMI
3. having any kind of previous physical or mental health condition will leave person more susceptible to some of the negative impacts of alcohol use. For example, if someone struggles with anxiety and depression, his/her mental health symptoms can be much more severe the following day. You may have heard that alcohol is a ‘depressant’, which actually means it depresses the central nervous system.
4. Lastly, being under the age 25 also leads us to be more susceptible to some of the negative impacts of alcohol use, with the impact being higher the early alcohol use is initiated and the more alcohol is consumed.

Why are alcohol and substance use even more harmful for youth than for adults?

Teen brains are still “under construction” and are more heavily impacted by alcohol and substance use until after age 25.



Compared to adults, teens using substances are more likely to:

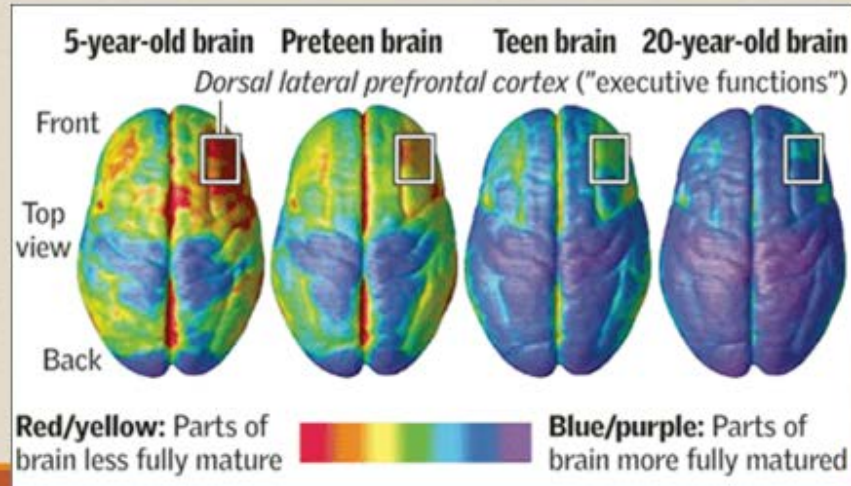
- **develop an addiction in shorter periods of time and even at lower levels of alcohol and substance use**
- **develop mental health issues due to alcohol and substance use**

SLIDE 17

Many of you are probably wondering while the effects of alcohol would be worse on some than others and in particular why it would be worse on young people as opposed to people who are over 25..... this is because brains develop until the age of 25. Teen brains, therefore, are still growing and essentially still under construction. This means that normal brain development that is supposed to occur during this time, can be impacted by alcohol and substance use until after the age of 25.

So, for example, compared to adults, teens who use substances are more likely to develop an addiction, even with lower amounts of alcohol consumed than people who are over 25, and in a shorter period of time. People who are under 25 or also more likely to develop mental health issues due to alcohol and substance use. Alcohol interferes with the developing brain and this is really important to understand in order to prevent some of these things from happening and to make sure we're as safe and healthy as we can be.

The area of the brain responsible for judgment is not fully developed in teenagers. Using substances can damage this underdeveloped area of a teen's brain.



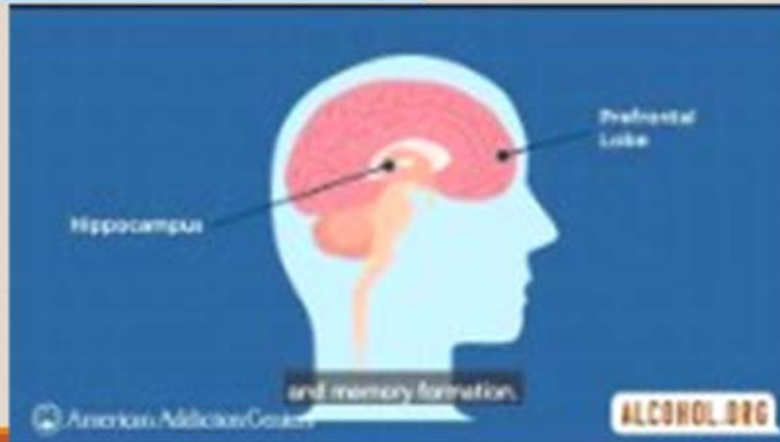
SLIDE 18

It's also very important to highlight that the section of the brain that's responsible for judgment and decision-making is not fully developed in teenagers. This is a scientific fact that can't be denied no matter how mature or well behaved and successful we are as young people. So, using substances during this time frame can also damage this underdeveloped area of the brain, and impair our judgment even further, simply because of the effects of alcohol and other drugs on the brain.

You can see from the illustrations the prefrontal cortex of the brain that's responsible for planning, decision making and executive functions and how it's not quite developed even in the 20-year-old brain.

Video: “How does alcohol affect the teenage brain?”

<https://www.youtube.com/watch?v=NiIRKU8GAZ4>



SLIDE 19

Please now take a little bit of time to view the following video that describes more specifically how alcohol affects the teenage brain.

PROBLEM: We are ALL exposed to misleading information about alcohol

Unfortunately, the alcohol industry often portrays alcohol use in a positive light in the media



SLIDE 20

Unfortunately, the alcohol industry often portrays alcohol in a very positive light in the media, including glamorous images in advertising and even in memes we see on social media. Some alcohol is even marketed specifically towards women, suggested you can maintain a slim figure, for example, while having a drink. This information is very misleading. Alcohol industry simply wants people to buy more and more alcohol and this is how they make money.

PROBLEM: We are ALL exposed to misleading information about alcohol (cont'd)

There are many headlines claiming that some types of alcohol may be healthy to drink, which is **NOT TRUE**



SLIDE 21

As part of misleading information about alcohol, there are also many headlines claiming that some types of alcohol may even be healthy for us and lower the risk of certain health conditions (for example, heart problems), however this is not true.

Even if there are some understood small positive health benefits of alcohol use (and only after age 65!), scientific research clearly indicates that the negative consequences and side effects of alcohol use, far outweighs any benefits.

PROBLEM: Several popular misconceptions exist about drinking alcohol in your teens

MISCONCEPTION	FACT
✗ All of the other kids drink alcohol. You need to drink alcohol to fit in.	✓ Many teens in Ontario do not drink alcohol, especially not on a regular basis!
✗ Drinking is a good way to loosen up at parties.	✓ Drinking alcohol is actually a very hazardous way of loosening up, as it can make you say and do things you normally wouldn't do, and makes you more vulnerable in dangerous situations.
✗ Beer and wine are safer than liquor.	✓ Alcohol is alcohol. When consumed in the normal serving sizes, beer and wine are just as damaging as liquor.
✗ There's no reason to wait until you're 19 to drink alcohol.	✓ When you're young, drinking alcohol can make learning and doing new things difficult, is more likely to result in mental health issues and put you in dangerous situations.

SLIDE 22

Some of this misinformation that's widely spread about alcohol use then leads to many misconceptions around drinking alcohol, particularly during our teenage years. For example, teens may be concerned with fitting in and may feel the need to drink during social outings and events in order to fit in with the crowd and be included in activities and social circles. Many young people may actually do not want to drink – think of beer, for example, you may have heard it be referred to as an acquired taste, which can start off as being unappealing but then can become more acceptable over time.

In fact, there are many teens in Ontario and other provinces who don't drink alcohol, and especially not on a regular basis. We should share this information with others to relieve some of the misguided pressures to consume alcohol that some people experience.

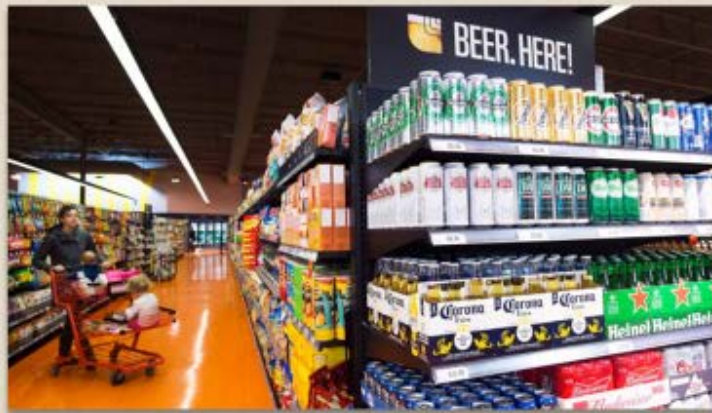
There's also this misconception that drinking is a good way to loosen up at parties. However, drinking alcohol can be a very consequential or even dangerous way to loosen up at parties because you may behave in ways that are quite different to your sober self and you may do and say things that you're not proud of and maybe even quite sorry for the following days. Alcohol use can also put you in unsafe positions where you're far more vulnerable and the results can be quite dangerous for you and for others. For example, consuming alcohol might make you more vulnerable to violence, sexual abuse, walking home alone because you cannot drive, or even using poor judgment and getting into a car with someone who's been drinking or using other substances.

There is also a misconception that beer and wine, for whatever reason, are safer than liquor however it's really important for all of us to remember that alcohol is alcohol and when we consume the normal serving sizes, beer and wine are just as damaging as liquor.

There is also the misconception that there's no reason to wait until you're 19 in order to drink alcohol just because the law says so. However, it's really important to remember that when you're young, drinking alcohol can make learning and doing new things really difficult. Alcohol can impair judgment and can reduce inhibitions and possibly lead us to doing things that we're not necessarily proud of..... however, and more importantly, alcohol can also increase the likelihood of us developing mental health issues. Please remember! Our brains are still developing until we're 25! The law that decides legal age is 19, does not necessarily reflect this fact.

PROBLEM: Compared to previous years, alcohol is now more available and easier to access

Unfortunately, unlike other drugs, alcohol can be found in grocery stores, which may lead people to buy and consume more than they normally would



SLIDE 23

Another part of the problem that we are experiencing today is; compared to previous years, alcohol is just far more available and easier to access than it ever was in the past. This contributes to the overall understanding that alcohol is and 'should' be a part of everyday activities. Just 100 years ago, alcohol sales were prohibited, but things are very different today. Unfortunately, unlike other drugs, alcohol is now available in grocery stores and as a result people are consuming more than they normally would.

Consequences of misinformation and increased access to alcohol

Regardless of conflicting messages, the fact remains that alcohol use can **impair health, well-being and safety.**



SLIDE 24

Regardless of conflicting messages and increased access to alcohol, the fact remains that alcohol use can impair health, well-being and safety – even if purchased from your local grocery store. There are consequences to this misinformation and people are drinking more as a result. This is something that we always have to keep in mind because regardless of the conflicting messages the fact remains that alcohol use can impair our overall health, our sense of well-being, our social and family connections and our physical and emotional safety.

Consequences of misinformation and increased access to alcohol (cont'd)

Even if *YOU*
don't personally
experience or
see the negative
impacts of
alcohol,
hospitals do.



SLIDE 25

Even if you don't personally experience or witness the negative impacts of alcohol we think it's really important for all of us to remember that as mentioned our hospitals do . You might be surprised to learn – once the province started selling alcohol in grocery stores in 2018, there were over 24,000 more people admitted to emergency rooms than in the two years before that. This is a significant statistic as this number of people is the same as the population of a midsize Ontario city or town.

What is the healthiest choice?

- **Avoid** alcohol and other drugs
- **Work on other healthy habits** that will be long-lasting and will help you avoid alcohol later in life
- Even if you think you *might* choose to drink alcohol later in life, make sure you **delay** alcohol use for as long as possible (past your mid-20s)



SLIDE 26

So what is the healthiest choice for all of us? The healthiest choice would be to avoid the use of alcohol and any other drugs....

Healthier choices would involve working on other healthy habits that will be long lasting and that will help us to cope with life's challenges in good ways and in healthy ways and help us to avoid alcohol use later in life as well.

Even if you think you might choose to drink alcohol later on in life it would be wise to delay it and wait at least until after you've turned 25 until your brain has had the opportunity to reach its full potential and for you to be sure that there aren't any additional toxins or substances that will impair that growth and leave long lasting effects.

Healthy choices lead to healthy habits, healthy coping mechanisms and good health

- Stay sober and seek friends who do the same
- Eat a healthy, balanced diet with a variety of foods and practice intuitive eating
- Stay active, exercise at least 30 minutes per day
- Join clubs or teams based on activities you enjoy
- Develop and maintain a regular sleep schedule
- Spend time in nature, practise mindfulness and/or write in a journal
- Identify a support network of people you can trust (adults, friends, mentors), who you can go to if you are feeling unsafe
- Seek support for health concerns (physical/mental). We all need help from time to time, you don't have to struggle alone.



SLIDE 27

It's really important for all of us to remember that healthy choices lead us to healthy habits.... Which nurture healthy coping mechanisms and overall better health. This slide provides some strategies and tips that will help us reach our potential and to live our best lives.

So, make it your plan to stay sober and if this is really important for you then seek out friends who have similar plans and values. We all appreciate being surrounded by like-minded people in doing so helps us stay true to our goals and our overall direction in life no matter what it is. Do your best to eat a healthy and a balanced diet with a variety of foods in practice intuitive eating which means to enjoy the foods that you know will serve your body and mind best. Stay active doing things that you enjoy. Exercising for 30 minutes a day is the recommendation and it's certainly far easier to achieve when we pick something that we really enjoy and maybe even can enjoy with others.

It suggested that we consider joining clubs or team environments based on the activities that we enjoy as the team approach can help us stay committed even when we're feeling less energetic on a particular day for example. The joint effort and the sense of belonging to a 'team' and knowing that the team's ability to move forward in a good way will be impacted if you don't show up is sometimes quite a motivator for people to continue to be active and work towards their goals.

Time spent in the outdoors is also proven to be very good for overall well-being;

- so do try to spend time in nature,
- take the time to incorporate mindfulness in our day-to-day activities and routines
- maybe make a decision to write in a Journal giving yourself an opportunity to make plans for the future and keep track of how you're feeling and where you are in terms of

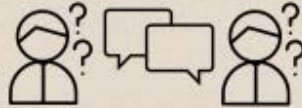
your hopes and your dreams and your goals and your aspirations. A Journal also provides us the opportunity to stay focused on some of the things that are going on in our lives whether they are to be celebrated or to be challenged. The Journal can be very helpful because it allows you to focus while it's 'opened' and it allows you to figuratively and literally 'close' it and put it away to move on to something else for a while so that we don't stay stuck in our overwhelming feelings of any kind.

It's also very helpful if we can identify and choose a group of people- a support network, that you can trust and that you know will be there for you when you were feeling unwell or unsafe. We all need helpers from time to time and it's important to have a few in mind that we can access when we really need them.

It's also really important to seek support for any kind of health concerns whether it's mental or physical. As mentioned, we all need helpers from time to time and you don't have to struggle alone. We wouldn't expect our broken leg to fix all by itself but sometimes we have this expectation that our emotions, our feelings and distressing thoughts and our mental health will somehow fix itself or is ours alone to struggle with. This is not true.

Discussion question

What are some benefits (health or other) of being/staying sober in the short-term or long-term?

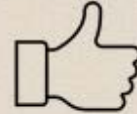


SLIDE 28

Now we will take a few moments to discuss the following question. What are some of the benefits health or other of being sober both in the short and in the long term?

Benefits of staying sober

- ✓ Be healthy on the inside (brain and all systems)
- ✓ Be healthy-looking on the outside (skin and body)
- ✓ Have better memory and cognitive abilities
- ✓ Have better performance in classes and in extra-curriculars
- ✓ Have better sleep and more energy
- ✓ Have fewer mood swings and be in a better mood overall
- ✓ Be a safe driver and avoid car accidents
- ✓ Be less vulnerable to violent or unsafe situations
- ✓ Save money
- ✓ Have healthier pregnancies/children and a happier family



SLIDE 29

In summary, there are many benefits of being and staying sober – that is, choosing not to drink alcohol or use other drugs.

- Being healthy both on the inside and the out - this includes our brain and all of our internal systems as well as our skin and overall physical appearance.
- Staying sober and choosing not to drink will also help us to have a better memory and overall thinking/cognitive abilities
- Choosing not to drink will also help us to have better performance in classes and extracurricular activities
- Staying sober will help us sleep better and allow us to have more energy in order to enjoy the things that we are doing throughout the day
- Staying sober will help us keep our moods stable, and be better positioned to deal with life's stressors and challenges
- Staying sober is especially important for road safety – avoiding alcohol and other drugs will keep us safe ourselves and others on the road safe.
- Staying sober can allow us to be less vulnerable to violent and unsafe situations
- Choosing not to drink can also help us save a lot of money 'cause alcohol is not cheap.
- Choosing not to drink can also help you have stable relationships and a happier family overall and can certainly lead to healthier pregnancies and children

DRY JANUARY® Alcohol Concern

About Dry January Why do Dry January? Get involved Fundraising Blog

SIGN UP, SAVE MONEY, FEEL GREAT

DOWNLOAD THE APP: DRY JANUARY & BEYOND

79% of participants saved money

62% of participants had better sleep & more energy

49% of participants lost weight

WARNING!
Side effects may include:

- ▶ Better skin
- ▶ Losing weight
- ▶ Sleeping better
- ▶ Saving money

DRY JANUARY®
DRY.JANUARY.ORG.UK

Dry January is an annual, global movement (est. 2013) where people sign up to go alcohol-free for the whole month. **4 million people** signed up in 2020 and noticed several positive effects.

SLIDE 30

The awareness of the various risks associated with alcohol use seems to be growing somewhat despite the mixed messaging and very robust marketing campaigns from the alcohol industry. In fact, as this slide indicates there's been a global movement which was established in 2013 for a 'dry January' which has continued annually and has grown in popularity over time. People sign up and participate with a number of others who also commit to go the month of January without any alcohol use. The impact is immediately noticeable.

As the slides indicate,

- 79% of the participants indicate that they saved a significant amount of money
- 62% of the participants had better sleep and demonstrated that they had more energy
- 49% of the participants actually lost weight just in the month of January alone.

As ANOTHER example, In Fall 2020, there was a new buzz and campaign supported by the Canadian Cancer Agency and the First Nations Health Authority to encourage participation in 'Sober October' there definitely seems to be an awareness and an acknowledgement of the risks associated with alcohol use and a desire to live a more balanced and healthier lifestyle which is incredibly positive.

Discussion question

What are some healthier strategies or activities teens could choose instead of using alcohol or other substances?



SLIDE 31

Let's take a few minutes to think about some healthier strategies or activities that young people can participate in or choose to do instead of using alcohol or other substances? Let's be really creative here and think outside of the box and hopefully inspire each of us to continue to build some strategies that will contribute positively to our overall well-being.

How can we still have fun while staying sober?

Video: "How To Have Fun Without Drinking":

<https://www.youtube.com/watch?v=DvbdontJBpQ>



SLIDE 32

Now we will take a few minutes to watch a video that will give us some examples and some inspiration regarding how we can enjoy our time being sober.

BUT...how can you turn down alcohol when it's offered to you?

Video: "3 Easy Ways to Refuse a Drink of Alcohol":

<https://www.youtube.com/watch?v=aaaNkf9nbfU>



SLIDE 33

Some people have a difficult time refusing alcohol when offered. It often presents a fairly awkward experience as we do not want to appear unappreciative, or anti-social. This short video will help us all to have easy ways to refuse a drink of alcohol available to us if and when needed in the future. Refusing alcohol should not be difficult, but it often is in today's culture, and particularly where alcohol is a large part of all social and family functions.

A person's decision to abstain from alcohol should be respected and not be questioned. Ultimately, a person's specific reason for not drinking is none of anyone's business.



SLIDE 34

It is really important for all of us to be able to make decisions on our own without feeling pressured by our peer group or from anyone. We all should be able to make decisions that are in line with our values and that help us to live our best lives. It's not for anyone else to choose for us particularly in social settings. A person's decision not to drink should be respected and should not be questioned. Ultimately and quite frankly whether someone chooses to drink or not is nobody else's business but their own. This slide demonstrates some examples of why people may be choosing not to drink but it is certainly up to you as to how open and forthcoming you want to be. It's not anybody's business for example if you're in recovery or if you have a family history of alcoholism or if you don't like the way it makes you feel or if you're on a particular medication that it doesn't sit well with or if it's against your religion or if you're feeling very stressed and maybe even agitated and angry not in a good mental state with an understanding that alcohol use would not be good for you at that time, but this is not anybody else's business. In adulthood, it's certainly not anyone's business to know whether or not someone is planning a pregnancy or is pregnant.

The decision to say no to alcohol should be a lot easier than some people experience. By doing so more often and by being more comfortable and casual with our response, and by requesting a soda, a glass of water, or an alternative of some sort.... This will only help us all be better positioned to refuse alcohol as desired. Also, refusing alcohol certainly does get easier as we get older.

SUMMARY: Alcohol's impact on teen health

- Alcohol impacts **ALL** bodily systems negatively – inside and outside.
- Alcohol is a **carcinogen** and a **toxin**, and is unhealthy in any amount, in any form, at any age.
- Alcohol is **ESPECIALLY** dangerous for youth – the brain is still developing until the mid-20s
- You don't need alcohol to have fun! There are many benefits to staying sober, for yourself and for others.



SLIDE 35

In summary some of the key messages that we've touched on so far include first and foremost that alcohol ***does have a negative impact on health, especially teen health.***

Alcohol impacts all bodily systems in a harmful way ... this includes our internal body systems and our external body systems that are more visible to ourselves and others. As it was mentioned alcohol is a toxin and we need to be clear that alcohol is also a carcinogen which is unhealthy in any amount, in any form, and at any age.

Alcohol use is especially dangerous for young people Because the brain is still under construction until at least age 25. That means alcohol can interfere with the way your brain was supposed to be developed and that can decrease its potential to work the way it was intended. For example. alcohol can impact memory, cognition, reasoning skills, decision making and increase impulsivity.

Also, we all want everyone to remember that we don't need alcohol in order to have a good time or to have some fun..... there are many benefits to staying sober for yourself and for others. We discussed that we all need helpers from time to time and sometimes when we're at social events where other people find themselves in trouble, when we're sober and when we're clear minded we can be helpful to make sure that good decisions are made and people remain safe.

If you or someone you know is struggling with alcohol, substance use or mental health:

Call Kids Help Phone: 1-800-668-6868 or ConnexOntario: 1-866-531-2600. They may help connect you to:

- Community mental health programs
- Crisis services and Distress Centres
- Support groups, family and health services
- Housing help centres
- Youth or senior programs
- Caregivers supports
- Food banks and meal programs



SLIDE 36

There is help available in Ontario specifically if we or anyone that we know of is struggling with alcohol or substance use and mental health issues.

The slide provides the number for kids help phone or ConnexOntario. Both of these support agencies may be able to connect you directly to;

- Local community mental health programs
- Crisis services in distress centres
- Local an accessible support groups for individuals and family members and additional health services
- These agencies can also connect individuals to housing help centres if if we or people that we know are at risk of losing their stable housing
- Connections can be made to youth or senior programs to offer support that would be different of course but yet very helpful in addressing alcohol use and misuse
- There's also community supports available for caregivers of individuals who are experiencing difficulties with alcohol or substance use and these agencies can also connect to local food banks and meal programs that can help with food insecurity.

UNIT 2

Impacts of alcohol use in pregnancy and Fetal Alcohol Spectrum Disorder (FASD)



SLIDE 37 – BEGINNING OF UNIT 2

This lesson is going to focus on the impact that alcohol has on the mother and child during pregnancy and being exposed to alcohol in the womb puts the baby at risk, and often results in Fetal Alcohol Spectrum Disorder, or 'FASD'.

Discussion question

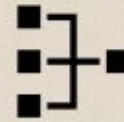
Can you think of what may influence some women to drink alcohol while they are pregnant?



SLIDE 38

Will start this unit with a discussion question. This time we'd like you to think about and discuss what might contribute to or what might influence women to drink alcohol while they are pregnant?

Factors influencing alcohol use in pregnancy



- Women might not know they are pregnant (**unplanned pregnancy**)
- Alcohol is often part of celebrations or socialization, and women **may feel pressured to drink**, especially if they haven't yet "announced" their pregnancy
- Women may have heard it is okay to drink alcohol in pregnancy, from friends, family members or even in the media
- Alcohol is consumed as an **unhealthy coping strategy** to deal with difficult life experiences
- Women may have an **alcohol or drug addiction** before and during pregnancy

SLIDE 39

There are many factors influencing alcohol use that takes place during pregnancies. None of the factors at play, however, include the woman's deliberate attempt to harm the growing baby. That is not the case at all – pregnant women do not wish to harm their babies. The circumstances are complex and convoluted, and it's not necessarily about just the woman's choices and actions. For example; they may not be aware of the pregnancy at all - this occurs quite frequently because over 50% of pregnancies are unplanned. It doesn't take long to understand that many pregnancies are exposed to alcohol.

Alcohol is a part of many celebrations and many opportunities that we take to socialize. And oftentimes unfortunately, women are made to feel pressured to drink especially if they haven't made the pregnancy public or officially announced the pregnancy yet. Women may have heard that it's OK to drink alcohol during the pregnancy as we know that message is spoken often from friends, from medical providers, from social service workers, from family members, from television shows, from songs that we hear on radio and from other various forms of media. HOWEVER, the evidence to date clearly indicates that even small amounts of alcohol could be harmful for the unborn baby. The wrong kind of messaging leads to significant confusion and negative impacts for the baby and family. Alcohol for many is also consumed as an unhealthy coping strategy to deal with difficult life experiences. And especially if women have gotten used to drinking in order to cope, this may especially be the case during the time they are pregnant. Women may also struggle with a significant alcohol or drug addiction before and or during the pregnancy. The addiction makes quitting extremely difficult for many in particular for those without direct support. Many women who struggled with alcohol addiction during their pregnancy wish that they could have had the support they needed in order to ensure alcohol free pregnancies.

Partner/relationship influences on alcohol use in pregnancy

Alcohol in pregnancy is not just about the woman's individual choices! Men/partners have a huge influence on:

- Relationship/family dynamics and communication patterns
- Stress levels and coping mechanisms
- Pregnancy planning
- Alcohol and substance use patterns



SLIDE 40

Alcohol use during pregnancy is not just about the women's individual choices! Partners have a direct role to play ... with a huge influence on the dynamics of the relationship itself meaning "is the relationship healthy?" "Is there domestic violence experienced by women who are pregnant?" ... "Is alcohol use a coping strategy for both partners?"

Relationships and family dynamics as well as communication patterns can significantly influence alcohol use.



SLIDE 41

There are also many other factors that come to play when it comes to alcohol use during pregnancy that clearly make it so that alcohol use is not simply a 'choice'. For example;

- if people are struggling with poverty or they experience food and housing insecurities, they are more prone to substance use in general, and this includes during pregnancy
- alcohol and substance use can often become an escape and a common strategy to deal with extreme stress, which is an unhealthy coping mechanism that may be as a result of psychological trauma, whether it's current historical or intergenerational
- Individuals and family members who have limited access to education regarding healthy lifestyles and mental Wellness are at a disadvantage in this area as are people with limited access to healthcare in general. If we do not know alcohol use during pregnancy is harmful and we don't come into contact with doctors who tells us this, this may increase risk of alcohol use during pregnancy and may cause harm to the fetus
- We've discussed that increased alcohol accessibility at the local grocery stores and corner stores for example, make it so that alcohol is just far more prevalent in day-to-day activities and the advertising campaigns make drinking alcohol look like a normal, healthy and fun thing to do. Except for mothers against drunk driving, there are very few examples of adverse side effects of alcohol use acknowledged or validated in our media.
- Social acceptance of alcohol use and as we mentioned, peer pressure also makes people feel like alcohol use is pretty normal and acceptable even in those early weeks prior to the awareness of the pregnancy or prior to the public acknowledgement of the pregnancy.
- Racism and stigma of many different kinds and discrimination of any kind also are contributing factors that influence alcohol use in general, as well as during pregnancy.

This is a systemic issue in which groups of people learn to respond to repeated circumstances of not being treated equally. As well, there is discrimination of people who have had addictions or who come from families where there are problems with addiction. Most of the time there's not a lot of conversation around alcohol use during pregnancy because of these stigmas as well. People see alcohol use and addictions of any kind as a personal choice, rather than a possible symptom of something else, and/or medical condition that needs to be treated.

Warning:
Drinking alcohol during pregnancy can cause birth defects and brain damage to your baby.

Pregnant?
No Alcohol is Safest.

Experts agree: There is no safe amount or type of alcohol to drink, at any time during pregnancy.
PREGNANT?

1-877-EAS-INFO • www.alcoholfreepregnancy.ca Ontario CANADA.CA/HEALTH Canada

SLIDE 42

It's really important for all of us to understand and share the message that the experts all agree on. This message is "there is no safe amount ... no safe type ... and no safe time to consume alcohol during pregnancy". People should be warned and made aware of the risks associated with alcohol use during pregnancy, as this can have many harmful health impacts on the child.

How does alcohol affect the baby in the womb?

Video: "Dangers of drinking alcohol while pregnant":

<https://www.youtube.com/watch?v=wK2ea9F2iZA>



SLIDE 43

Now we'll take a little bit of time to view this video that helps to describe the dangers of drinking alcohol during pregnancy and how the alcohol impacts the baby in the womb.

Alcohol travels directly to the baby via the umbilical cord in the womb.

Alcohol can affect the fetus even when it is the size of this 'zero' in the coin. When it is this size, the fetal brain, heart, eyes, and face have already started to develop.

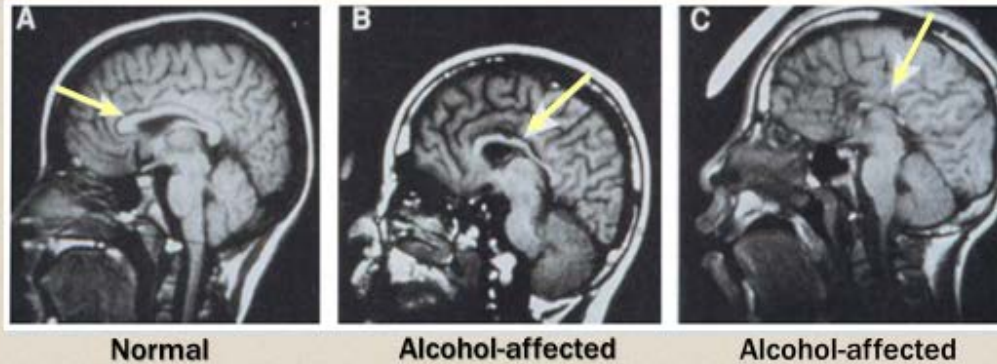


SLIDE 44

After a pregnant woman ingests any kind of alcoholic drink, the alcohol swiftly passes through the umbilical cord, reaching the fetus. There, it affects all developing parts of the baby, including the brain, central nervous system (CNS), heart, eyes, ears, legs, arms, teeth, external genitalia, and palate of the fetus. Babies do not have the ability to break down alcohol in the same way that adult women do, so their blood alcohol level, initially the same as the mother's, stays increased for longer. You will recall that alcohol is especially dangerous for children and youth because their brains and bodies are still developing. If you think about how harmful alcohol can be for the health of teenagers and adults, this impact is astronomically higher for babies still in the womb. Alcohol can have damaging effects to the fetus, including in early pregnancy, before most women even know they're pregnant. Alcohol can affect the baby's brain when it is the size of this 'zero' in the nickel you see.

When the embryo is the size of that zero in the coin it is approximately 17 days old (or 2-3 days after conception), and at that point, it already has the cells that will form the brain, heart, eyes and the face. Therefore, alcohol can damage these cells and impair development.

Exposure to alcohol in the womb can cause permanent brain damage, affecting important structures such as the cerebellum and corpus callosum



There is a permanent loss of the corpus callosum tissue

Source: Mattson et al. 1994. Alcohol Health & Research World

SLIDE 45

The pictures on this slide show clearly that alcohol can permanently damage the fetal brain. Several parts of the brain are discussed here. You can think of the corpus callosum as being the “conductor” of the brain, responsible for carrying messages across. The cerebellum is responsible for coordinating the body’s movement and balance – you can think of it as a “yoga/fitness instructor”. If there is damage to the corpus callosum or cerebellum, this can result in difficulties with movement and body coordination, speech delays or difficulties, mental disorders and/or challenges with social interaction.

On this slide, we see two images: the brain of a normally developing individual (image A) – the arrow points to a properly developed corpus callosum – and two individuals with Fetal Alcohol Syndrome (the most severe type of Fetal Alcohol Spectrum Disorder) (images B and C) – the arrow points to a permanent loss of the tissue of the corpus callosum. On image C the tissue of the corpus callosum is almost invisible.

In most cases, however, the effects of exposure to alcohol in the womb are most often undetectable on an MRI or brain scan. Any exposure to alcohol in the womb means negative impact, lost potential and any deficits as a result of this will last a lifetime.

What is Fetal Alcohol Spectrum Disorder (FASD)?

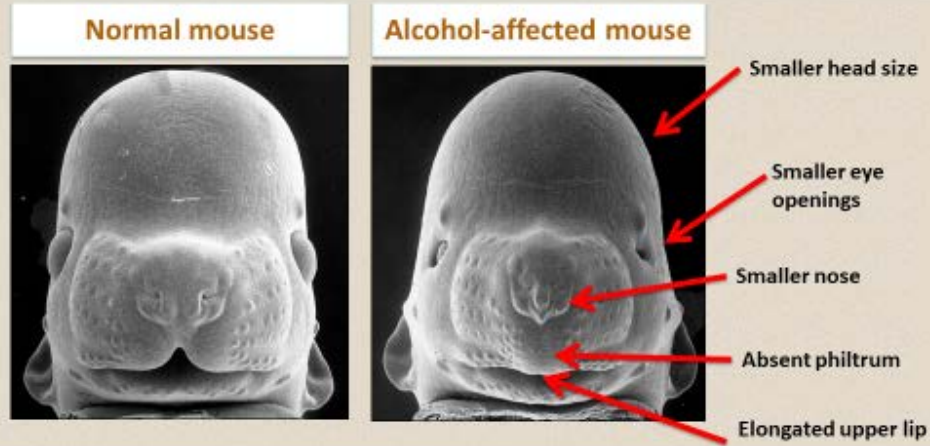
Video: "FASD: A 3-Minute Introduction - The Asante Centre":
<https://www.youtube.com/watch?v=-mBSL0foahc&t=10s>



SLIDE 46

Now let's take a few minutes to look at a video that helps to introduce us all to what FASD really is.

Studies show that animals who were exposed to alcohol in the womb have visibly different facial features, which might be present in humans as well



SLIDE 47

Now, let's take a close look at these two photographs of little mice that are still growing in their womb. On the left you see a normal mouse who has not been exposed to alcohol in the womb. On the right is a mouse who has been exposed. Clearly you can see that the face of the mouse on the right has been impacted when you compare the two. Like humans, mice that are exposed to alcohol in the woman may have smaller head sizes, their eyes and their openings are quite a bit smaller, their nose is smaller and the upper lip itself is longer than normal.

FASD is largely a **hidden** disability

- Only a **small proportion** (10%) of individuals with FASD have certain facial features, which **can ONLY be measured and identified by a trained doctor** with specialized tools/software. Some of these features are:
 - Smooth or flattened philtrum (groove between the nose and upper lip)
 - Short palpebral fissures (the area between the open eyelids)
 - Thin upper lip
- Even if these features are present, they fade over time (with age).
- For the most part, **you CANNOT tell who has been exposed to alcohol in the womb just by looking at them.**



SLIDE 48

FASD is largely a hidden disability and it's also one of the most misdiagnosed and misunderstood disabilities out there. Part of the reason for the misunderstanding is that only a very small portion; less than 10% in fact, of individuals with FASD have those certain identifiable facial features.

These certain facial features can be measured and identified by a trained clinician with specialized tools and software. Some of these features are:

- a. the groove between the nose and the upper lip, called the "philtrum", is smoother and longer than it would have been
- b. The distance between internal and external corners of the eye, which is called 'palpebral fissures', is shorter.
- c. and a thin upper lip

It's important to understand and acknowledge that even if these features are present, they will fade overtime and with age making them less identifiable and recognizable. For the most part it is really difficult to tell who's been exposed to alcohol in the womb just by looking at them, making this disability truly hidden on a societal level.

FASD: How common is it?

- Approximately **4% (1.5 million people)** in the general population of Canada have FASD.
- FASD is **more common than Autism Spectrum Disorder or Down's Syndrome combined**
- FASD is the leading known cause of developmental delay in Canada.
- In some sub-groups of people in Canada (e.g., children in foster care or individuals who are incarcerated), the number of people with FASD is **at least 10 times higher**.



SLIDE 49

Fetal Alcohol Spectrum Disorder or FASD ... just how common is it? How often do we see people affected by prenatal alcohol exposure? Where do you think you'll be most likely to see people who do you have FASD?

Please take a moment and think about this next fact ... approximately 4% which means 1.5 million people of the general population in Canada would qualify for an FASD diagnosis. FASD is more common than autism spectrum disorder and Down syndrome combined.

FASD is the leading known cause of developmental delay in Canada and in some subgroups, for example; children in foster care or individuals who are involved in the justice system, maybe in jail, the number of people with FASD is at least 10 times higher. This means that people with a developmental disability are being incarcerated at a much higher rate than people without FASD but yet they're still being treated/consequenced and rehabilitated in the same way.

Any organ or system of the body can be negatively affected by alcohol during pregnancy (not just the brain).

People with FASD may experience multiple physical health problems including, but not limited to:

- Organ defects
- Kidney diseases
- Visual and hearing impairments (i.e., blindness; deafness)
- Teeth malformations and speech problems
- Heart diseases
- Nervous system diseases
- Musculoskeletal conditions (bone growth issues, problems with joints)
- Poor growth (shorter-than-average height)

SLIDE 50

Fetal alcohol spectrum disorder is a “whole body” body experience for those affected. Any organ or system of the body can be negatively impacted by alcohol during the pregnancy. Prenatal exposure to alcohol does not just affect the brain ... the brain in its capacity fully affects other systems within the body, including: our coordination, our balance the way we process sounds, touch, sight etc., people with FASD experience multiple physical health problems including but not limited to;

- organ defects
- kidney diseases
- visual and hearing impairments for example blindness deafness
- sometimes we find that there are teeth malformations that result in speech problems but there are speech problems that are not necessarily related to teeth malformations as well
- there is also a link to heart disease
- Nervous system diseases
- And there are also a number of bone growth issues, problems with joints early onset of arthritis for example.
- and although this isn't absolute, there is often an Association with poor growth ... many, but not all people who have experienced significant prenatal alcohol exposure have growth issues and are often shorter than average in height .

Due to the permanent damage to the central nervous system (brain), individuals with FASD may experience:

- Poor memory, attention, academic difficulties or school dropout
- Poor reasoning and judgment skills
- Speech and language difficulties
- Mental health issues and addictions
- Difficulties getting or maintaining employment
- Involvement in the criminal justice system (as victim or offender)
- Learning disabilities
- Behavioural problems, impulsivity, poor social skills
- Hyperactive behaviour and trouble completing tasks
- Inability to live independently
- Involvement in the criminal justice system (as victim or offender)
- Homelessness

SLIDE 51

In addition to some of the physical complications, individuals with FASD may also experience:

- Inconsistent memories, difficulties with concentration and attention, which often contribute to poor academic performance and often will lead to dropping out of school entirely.
- prenatal alcohol exposure is directly linked to poor reasoning skills and poor judgment. This leaves individuals to be more prone to being gullible and naïve, and therefore vulnerable to being taken advantage of and to be lead into circumstances that are not necessarily in line with their values.
- there are often speech and language difficulties. It is very common for people who are experiencing the effects of prenatal alcohol exposure to be very good communicators in terms of expressive language ... But struggle sometimes quite significantly with their ability to receive language and to interpret it correctly and to be able to retain and recall what's been said to them (i.e., Directions, rules, functions, plans etc.)
- it is very common for people who have FASD to struggle with additional mental health issues and be more susceptible to addictions
- oftentimes individuals with FASD also experience difficulties finding employment but most often they would experience difficulties maintaining employment due to ongoing challenges associated with meeting deadlines, memory, responsibility adjustments, difficulty with transferring skills to similar but different circumstances, changes to schedules, being physically well enough and prepared for each day etc.
- We've mentioned already that many people with FASD have trouble with the law at some point in their lives. There is an increased vulnerability among individuals with FASD because of their neurological impairments and impulsivity. They are prone to

people-pleasing, which can mean that they can be led into gang-like atmospheres, and also be victimized by people with criminal intent

- people with FASD often experience learning disabilities that can be quite specific. So their learning profiles can be quite varied with some significant deficits but some additional significant strengths so for example it would not be uncommon for somebody to really struggle with mathematical computations but yet be a very accomplished novelist, poet or singer songwriter.
- Behavioral problems, impulsivity, not learning from one's mistakes and ongoing difficulties within social circumstances are common difficulties associated with fetal alcohol spectrum disorder
- people with FASD also struggle with hyperactivity which means that settling down and completing tasks can be very difficult
- the research so far indicates that most people with FASD struggle quite significantly with independent living - paying bills on time, money management, keeping up with daily living activities and housekeeping for example.
- and many of the people currently struggle with fetal alcohol spectrum disorder – often undiagnosed with many other mental health diagnoses.

The economic impact of FASD is high

- Due to the numerous health conditions and specific life experiences of individuals with FASD, the economic impact of FASD is high
- The lifetime care for an individual with FASD may cost up to **\$1.5 million CAD**
- **FASD is lifelong – there is no “cure”,** but there are interventions and supports to help individuals with FASD work towards living healthy, fulfilling lives

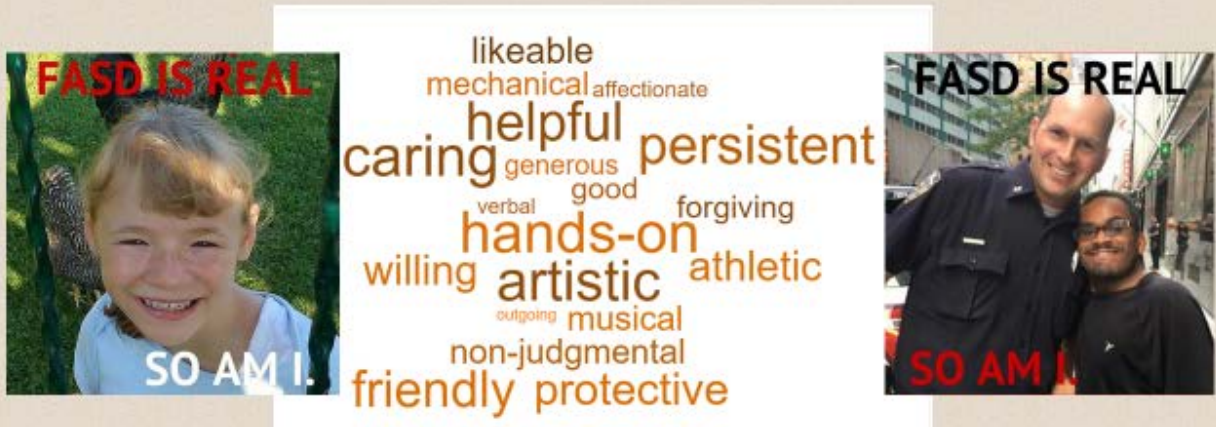


SLIDE 52

There is a significant economic impact associated with fetal alcohol spectrum disorder. This includes cost of health care, special education, residential care, criminal justice system, productivity losses due to morbidity and premature mortality, and productivity losses of caregivers of people with FASD. The lifetime care for an individual with FASD may cost up to 1.5 million Canadian dollars. Families or others caring for people with FASD have large unreimbursed expenses that may change how they live.

Although this is often difficult to accept and to thoroughly understand, it is important to remember that FASD is a lifelong disability - there is no 'cure', but there are interventions and supports to help individuals with FASD work towards living healthy fulfilling lives and to be better positioned to reach their potential.

While they do face significant life challenges, individuals with FASD **also** have many different individual **strengths and talents** that should be found and supported



SLIDE 53

There is no question or debate that people with FASD face significant life challenges. However, it is equally important to understand and acknowledge that people with FASD also have many different individual strengths and talents that should be identified, celebrated and supported. People with FASD are often described as being likable because they are warm, they are caring, and they are incredibly accepting and tolerant. People with FASD often start each day as a new one ... willing to let go of the past and begin fresh with a positive attitude full of hope. People with FASD can be incredibly talented ... gifted in fact with creativity, artistic ability, mechanical understanding, tenacity, athletic ability, musical talents etc. People with FASD can also be generous, caring, persistent, forgiving, non-judgmental, friendly, and protective of their loved ones.

FASD looks different from person to person

Video: "Living with Fetal Alcohol Syndrome"

https://www.youtube.com/watch?v=YCg7_aZbchc



SLIDE 54

Although there are some commonalities associated with FASD which allows for consistent and accurate diagnosis. it's important to remember that the impact of alcohol on the growing baby varies from person to person in large part due to the natural variances re: when the alcohol was consumed, how often the alcohol was consumed, and what other kinds of risk factors and or protective factors have been associated with the individual and family overall, including genetics and environment. When there is no alcohol consumed and within the mother's system, then the baby will develop healthy and will 100% not have FASD.

Let's take a few moments to watch this video that helps us to understand what it's like to be living with fetal alcohol spectrum disorder.

FASD looks different from person to person

Video: "Morgan Fawcett on living with FASD"

<https://www.youtube.com/watch?v=K0VrkLQfkFg>



SLIDE 55

Now we invite you to take another few minutes to view the following video where Morgan Fawcett tells his own story about his experiences living with FASD. Morgan Fawcett also helps to explain that FASD looks very different from person to person and may benefit from a comprehensive assessment in order to help identify the individual strengths and areas of challenge that need to be properly supported.

How can we prevent the negative impacts of alcohol use during pregnancy such as FASD?

- The safest, healthiest choice is to **NOT drink at ALL (any amount or type)** at any time while:
 - At risk of becoming pregnant
 - Planning for a baby
 - Pregnant
- Abstaining from alcohol completely during all of these times will ensure there is no FASD in the child
- Abstinence will minimize the risk of learning disabilities and other mental health issues, as a result of permanent changes to the brain from alcohol.



SLIDE 56

Being that FASD is the leading cause of developmental delays in the Western world, there is clearly a benefit to ongoing prevention conversations and initiatives. However, in spite of our efforts thus far, alcohol use during pregnancy seems to be on the rise. It's important for us to have ongoing conversations and also to explore how we can be doing things a little bit differently. It's important to ask how we can prevent the negative impacts of alcohol use during pregnancy such as fetal alcohol spectrum disorder.

- To begin it's important to remember that the safest and healthiest choice is to not drink at all at any time when there may be pregnancy. So, this means if two people are sexually active and not using protection, there's a chance of a pregnancy. If a couple is planning for a baby or at risk of becoming pregnant, then the safest choice is to abstain from alcohol completely. This is also the case if a pregnancy is confirmed already – the safest choice is to abstain throughout the whole pregnancy and to surround yourself with people who will help support that decision.
- Ensuring that there is no alcohol consumption during pregnancy will completely protect the baby from the impact of prenatal alcohol exposure and will ensure that FASD will not be possible
- abstinence from alcohol will also minimize the risk of learning disabilities and other mental health issues. If there's been no alcohol then there won't be any potential mental health or learning difficulties or permanent changes to the brain or other organs as a result of alcohol exposure.

An **alcohol-free** and **drug-free** pregnancy is the safest choice for the mother and baby

It is important to also avoid tobacco, cannabis, opioids and illicit drugs while pregnant. They have their own negative effects and can even increase the risk of FASD (if used with alcohol).



SLIDE 57

As we've discussed, an alcohol and drug free pregnancy is the safest choice for both mother and baby. Again, it's important for all of us to do what we can to ensure that pregnancies are as healthy as they can be and that includes also abstaining from tobacco cannabis opioids and other illicit drugs while pregnant ... They have their own negative effects and can even increase the risk of FASD if alcohol is also consumed with the substances listed above.

Alcohol should also be avoided while breastfeeding

- After birth, infants might be exposed to alcohol through breastmilk if the mother has consumed alcohol during that time
- Babies cannot metabolize alcohol in the womb or after birth in the same way adults can, and it stays in their system for far longer and can be very harmful



SLIDE 58

As we discussed earlier in Unit 1, the brain continues to be under construction until age 25 and it is recommended that alcohol use not take place before this time. It stands for reason then that drinking alcohol while breastfeeding should also be avoided, as alcohol can be very harmful to infants.

- The alcohol consumed by moms after giving birth will go directly to the baby through breast milk and this alcohol can impact development systemically. The alcohol level in breast milk is essentially the same as the alcohol level in a mother's bloodstream, and remain in the breastmilk for hours after drinking, depending on how much was consumed.
- Babies cannot metabolize alcohol in the same way adults can and as a result the alcohol stays within their system far longer and continued to damage systems for a longer period of time.

Infants exposed to alcohol through breastmilk can have health problems, including:

- Delayed or interrupted cognitive development
- Interrupted motor function development
- Disrupted sleep patterns
- Excessive crying
- Increased agitation or irritability
- Delayed growth
- Difficulty latching/feeding



Therefore, abstaining from alcohol is the safest, healthiest choice while breastfeeding

SLIDE 59

Research has clearly indicated that infants who have been exposed alcohol through breast milk can also have significant health problems including but not limited to:

- a. delayed or interrupted cognitive/thinking development
- b. interrupted motor function which means that their movement and coordination skills can be somewhat delayed and/or impaired
- c. disrupted sleep patterns which doesn't help anyone adjust to the new baby experience - things are tougher for all in the family if people are lacking sleep.
- d. alcohol exposure through breast milk can also lead to a fussy baby with excessive crying which again doesn't help with the adjustment for either parent or child
- e. infants exposed to alcohol through breast milk can also experience increased agitation or irritability
- f. there could be delayed growth associated with alcohol exposure through breast milk
- g. and finally, there has been a link to a difficult latch and challenging feeding experiences for babies who've been exposed to alcohol through breast milk

The final message here would be similar to what we've been discussing throughout this curriculum, and that would be; the safest, healthiest, choice while breastfeeding would be to avoid alcohol use altogether.

Video: “Drinking while breastfeeding could hurt a child's brain development”

<https://www.youtube.com/watch?v=JsZKkRCkVv0>



SLIDE 60

Now let's take a few minutes to watch a video that helps to explain the risks associated with drinking alcohol while breastfeeding and what it can do to a child's brain in its development.

SUMMARY: Alcohol's impact on pregnancy and FASD

- Alcohol use in pregnancy can damage the fetal brain and lead to FASD in the child, which is a serious lifelong disability.
- FASD is different from person to person. Individuals with FASD may have many different physical conditions and negative life experiences that are related to their permanent brain damage.
- Alcohol and other drugs should be **COMPLETELY** avoided during pregnancy and breastfeeding.



SLIDE 61

We've discussed a great deal in Unit 2 details about the negative impact of alcohol exposure during pregnancy. In summary, it will be important for everyone to remember the following:

- a. Alcohol use in pregnancy can damage the developing brain and can lead to fetal alcohol spectrum disorder in the child. FASD is a serious and lifelong disability that will require various supports across the life span.
- b. FASD is different from person to person and it depends on the amount of alcohol consumed when the alcohol was consumed and what other protective or risk factors are contributing to the situation. Individuals with FASD may have many different physical conditions and negative life experiences that are related to their permanent brain damage.
- c. It is also really important to understand that people who are experiencing fetal alcohol spectrum disorder also have amazing strengths which need to be identified honored and nurtured... But there are significant struggles for each in this cannot be forgotten and needs to be emphasized in our prevention efforts.
- d. Alcohol and other illicit drugs should be completely avoided during pregnancy and breastfeeding.

UNIT 3

Supporting alcohol-free and drug-free pregnancies



SLIDE 62 – BEGINNING OF UNIT 3

Unit 3 will focus on how we all can support alcohol and drug free pregnancies. We must practice and offer compassion, understanding and non-judgemental support to pregnant women and their partners, now and later in life. This unit provides us with practical strategies we can use to promote healthy pregnancies in our communities.

FASD affects us all

- Alcohol use in pregnancy and FASD impacts not only the mother and child, but also **families, communities and society**.
- We must work to **support alcohol-free pregnancies** and to be respectful of individuals and families affected by FASD.
- **We are ALL responsible for FASD prevention!**



SLIDE 63

It's important to understand that FASD affects all of us. Alcohol use in pregnancy and FASD in particular, impacts not only the mother and the child directly involved, but also families, communities, and society in general.

It's really important for all of us to remember that we must work together to support alcohol free pregnancies and to be respectful and understanding, tolerant, compassionate, and accepting of individuals and families who are experiencing the impact of prenatal alcohol exposure.

And finally, it's really important to recognize that we are all responsible for FASD prevention ... we all can make a difference, and this is really exciting when you think about how many people are negatively impacted by alcohol use today and what things might look like 10 years from now if we all work collaboratively to help decrease the risk of alcohol exposure during pregnancy.

How many women in Canada drink while pregnant or breastfeeding?

10%

Consume alcohol
during pregnancy
(Among them, 3%
binge: 4+ drinks
per occasion)

20%

Consume alcohol
while breast-
feeding

SLIDE 64

We still have a lot of work to do and again we are emphasizing the need for us to do this together. Currently, at least 10% of women admit to consuming alcohol during their pregnancy and this number is on the rise ... Of the 10% who admit to consuming alcohol during pregnancy, 3% of them acknowledged binge drinking while pregnant, which involves 4 plus drinks per occasion and greatly increases the risk to the baby.

It's also really significant to acknowledge that 20% of women share that they consume alcohol while breastfeeding which we know can negatively impact the baby's development as well.

Discussion question

Thinking back to what may influence women to drink alcohol during pregnancy, what are some ways we can help pregnant women abstain from alcohol and other drugs?



SLIDE 65

Your teacher will now guide a discussion on possible ways of helping women abstain from alcohol and drugs during pregnancy. The teacher can now press pause on this slide.

Alcohol/drug-free pregnancy support strategy:

Increase awareness by educating others on the risks of drinking while pregnant

COMMON MISCONCEPTION	RESPONSE
"A pregnant woman having one drink every once in a while isn't going to harm the baby."	NO! Each sip of alcohol negatively affects fetal development.
"A woman can drink during her pregnancy – I drank during mine and my child is just fine!"	NO! Alcohol exposure in the womb affects each child differently and the effects of it are not always known/visible.
"Since she already drank before she knew she was pregnant, she might as well just keep drinking now. The damage is done."	NO! Once you know you're pregnant, you should stop drinking immediately. If you need help doing so, you should seek support from medical professionals.
"Of course a pregnant woman shouldn't drink vodka, but drinking wine or beer won't harm the baby at all."	NO! There is no safe type of alcohol to drink during pregnancy – even drinks with lower alcohol concentrations can be harmful to the fetus.

SLIDE 66

This slide describes an alcohol and drug free pregnancy support strategy because we understand that increased awareness by educating others on the risks associated with drinking while pregnant will lead to improved outcomes and reduced numbers of babies exposed. This is something you can work on now, well before the time you intend to start your own family. We need to affect positive change and part of that is refuting common misconceptions with facts you have learned today. These misconceptions are not only among youth, but are also found in some conversations among adults, where these misconceptions unfortunately influence decision-making around alcohol use in pregnancy.

For example, it is common for people to think and say that a pregnant woman having one drink every once in a while, isn't going to harm the baby. THIS IS INCORRECT - we now know that this is simply untrue and that every sip of alcohol contains toxins that do no good and can certainly negatively affect fetal development at any time from conception to the end of pregnancy.

Another common misconception is the assumption that a woman can drink during her pregnancy because other women have done it and they perceive it to not be harmful... Some might say "I drank during mine and my child is fine" ... This is ALSO incorrect - alcohol exposure in the womb affects each child differently and the effects are not always clearly understood or clearly visible. But that does not mean that there's not been lost potential. A child is ALWAYS healthier when not exposed to alcohol.

Another common misconception is the understanding that 'she already drank before she knew of the pregnancy so she might as well just keep drinking.... the damage is already done in those early month'. This is also not true! We do know that the less amount of alcohol consumed the better off the baby will be at birth and throughout life. Avoiding alcohol can reduce the risk of further damage. Once a woman knows that she is pregnant she should stop drinking

immediately and if she needs help doing so she should seek support from medical providers and supports in community.

Another common misconception is that certain types of alcohol can cause more damage than others, for example “of course a pregnant woman shouldn't drink vodka but drinking wine or beer won't harm the baby at all”. Again, this is INCORRECT. This goes back to the common misconception that wine is healthy, for example, but we know that this is not the case either because alcohol is alcohol and there is no safe type of alcohol to drink during pregnancy and even alcohol with lower concentration, even one serving size can be harmful to the developing fetus.

Strategies to support alcohol-free and drug-free pregnancies

- **Nobody should pressure anyone** to drink in social situations. The choice to abstain should be respected – people don't need to give you a reason!
- **Non-alcoholic beverages** should be made available and offered equally, without judgment.
- **Pursue alternative activities** where it is easy to remain sober (e.g., going to a movie theatre instead of a party).
- **Men/partners** can help reduce stress, ensure healthy relationship dynamics, and use family planning as needed.



SLIDE 67

Several effective, compassionate ways have been identified to support alcohol and drug free pregnancies.

- Nobody should pressure anyone to drink in social situations; nobody knows what's going on with individuals and they have a right to choose. The choice to not drink or abstain from alcohol should be respected at all times and people do not need to give a reason for their decision to not to consume alcohol.
- non-alcoholic beverages should be made available and offered equally without judgment. So, whenever there's a beverage offered we should always include a non-alcoholic choice, this will normalize the fact that many of us don't want to consume alcohol and that choosing a non-alcoholic beverages completely normal and fine and a choice often made for people who want to live a healthy lifestyle.
- Another strategy to abstain from alcohol use during pregnancy would be to pursue alternative activities where it is easy to remain sober. For example, one might choose to go to a movie Theatre with some friends rather than a loud party where there is going to be music, *dancing* and other activities commonly associated with alcohol consumption.
- It's also important to remember that partners have a really important role to play in terms of promoting alcohol and drug-free pregnancies by :
 - reducing stress
 - ensuring healthy relationship dynamics
 - be a part of family planning as required ...

- The partner can also make it easier for the pregnancy to be alcohol free by choosing to not drink themselves or to support their partner in various ways that help to ensure that the pregnancy is not exposed to alcohol

Alcohol/drug-free pregnancy support strategy: In adulthood, make sure you stay sober with your pregnant friend(s)



SLIDE 68

This slide gives some great examples of how we all can support alcohol free pregnancies ... If we know that our friends are pregnant maybe this would be a good time for us to choose a non-alcoholic beverage, and especially in their presence. This prevents pregnant women from feeling left out, and such support is always appreciated.

we can also introduce an activity to participate in that will be less likely to involve alcohol consumption. The messages within this slide are really hopeful and helpful and should be shared.

Alcohol/drug-free pregnancy support strategy:

In adulthood, women and their partners can make every trimester a **#Drymester** and influence others to do the same



SLIDE 69

Another strategy to support alcohol free pregnancies has been found to be helpful and successful has been centered on being alcohol-free TOGETHER. "Drymester" is a campaign that was created to inspire and support alcohol free pregnancies even in the planning stages. This campaign recognizes that there are a lot of different and conflicting messages out there, but they are being clear about the facts: there's no safe time no safe amount and no safe kind of alcohol to drink during pregnancies.

The picture in this slide highlights that both parents are involved in this circumstance which is really helpful ... It makes sure that the mother-to-be recognizes that she has a role to play to ensure that the pregnancy is as healthy as it can be. And so does her partner, they are in it together they're smiling they're happy they're hopeful and they are committed ... This campaign allows for people to come together and to support each other ... and to have knowledge about Safe choices that will more likely lead to their baby having the best start possible. When it comes time for us to begin our families, we should make every trimester a drymester and influence others to do the same by setting this example in our communities.

Alcohol/drug-free pregnancy support strategy

Encourage pregnant women with alcohol and addiction issues to **seek treatment and support** from:

- Family doctors
- Obstetricians/ gynecologists
- Nurses or midwives
- Community health centres
- Home-visiting programs (e.g., 'Healthy Babies Healthy Children' program in Toronto)
- Cultural centres
- Substance use treatment services



SLIDE 70

Another aspect to alcohol and drug free pregnancy support strategies includes the delicate conversations around addictions with people who really struggle with alcohol use. It's important for all of us to understand that we can do our part to encourage pregnant women with alcohol addiction issues to seek treatment and support in a kind non-judgmental, non-stigmatising way.

- We can help individuals seek support through their family doctors
- through their obstetricians and gynecologists
- through a nurse or midwife
- through community health centres and a variety of health promotion initiatives
- through home visiting programs and through cultural centres
- and through substance use treatment services.

Alcohol/drug-free pregnancy support strategy:

Use adequate contraception/family planning if using alcohol, and encourage others to do the same

Both **women and their partners** should be responsible for ensuring there is family planning and that pregnancies are alcohol-free and drug-free.



SLIDE 71

Lastly, both women and their partners should be responsible for ensuring that there are family planning strategies and that the pregnancies are alcohol and drug free ... this is not solely the mother's responsibility. Both partners must have conversations about how to work together towards the best future possible, including how to help each other make healthy choices and how to avoid unplanned pregnancies.

Key message: Alcohol and pregnancy don't mix!

The safest, healthiest choice is to **NOT drink at ALL (any amount or type), at any point while:**

- At risk of becoming pregnant
- Planning for a baby
- Pregnant
- Breastfeeding



SLIDE 72

The most important message to take away from this learning into certainly share amongst our own social circles is a very clear one. alcohol and pregnancy don't mix! The safest, healthiest choice is to not drink alcohol at all. This means that there is no safe type, no safe amount, and no safe time during the pregnancy. It is also the safest and healthiest choice not to drink at any point while there is a risk of an unplanned pregnancy or a chance that one could become pregnant; while planning for a baby, while pregnant and while breastfeeding. We know now that even small amounts of alcohol can negatively impact the growing baby. So, it just makes really good sense to not consume any types of alcohol at all that might interfere with your baby's development and their ability to reach their potential. You should also remember that alcohol is harmful in general, especially for young people up until the age of 25 while the brain is still under construction. Finally, it is everyone's responsibility to support alcohol and drug free pregnancies, and with the information you have learned in this module, you are ready to take this on.

CASE STUDY ACTIVITY

- 1. The teacher can divide students into 3 groups, use this activity as an overall class discussion OR use as an independent assignment.**
- 2. Students can analyze each scenario and answer the related questions.**

SLIDE 73

Your teacher will now carry out the case scenario activity. The teacher can now press pause on this slide to read instructions and carry out this activity.

Case study 1: Smita

Smita and her husband John have recently decided to try to become pregnant. With their decision in mind, Smita has been taking precautions to prepare herself for a healthy pregnancy. On New Year's Eve, she and her husband attend a party where people are drinking heavily. "Oh, come on, silly," her friend Nikki laughs. "One drink won't hurt you!"

1. Identify the decision Smita needs to make.
2. Identify options and possible consequences.

SLIDE 74 (no narration)

Case study 2: Aidan

Aidan is a college student. His older sister Megan recently announced that she is pregnant with her first child. Aidan invites Megan out to dinner to celebrate. He starts to order a bottle of champagne, but Megan protests, "I can't drink because I'm pregnant." Aidan is confused and hurt that she will not celebrate with him.

1. Identify how Megan could respond to Aidan.
2. Discuss the possible options and consequences.



SLIDE 75 (no narration)

Case study 3: Michelle

Michelle has just found out that she is pregnant. During her routine doctor visit, Michelle mentions to her doctor that she has heard that drinking alcohol while pregnant can harm her baby. Her doctor tells her that having a few drinks occasionally will not be harmful to the baby. She is uneasy with his response and leaves with mixed feelings.

1. What should Michelle do?
2. Identify options and possible consequences.



SLIDE 76 (no narration)

STUDENT QUIZ ACTIVITY

1. The teacher will now distribute the quiz to students.
2. Students can work through the questions together as a class or use as an independent assignment to take home.

SLIDE 77

Your teacher will now distribute the student quiz to the class. The teacher can now press pause on this slide to read instructions and carry out this activity.

Student quiz

1. One can always identify a child with FASD by the way they look.
 - a) True
 - b) False

SLIDE 78 (no narration)

Student quiz

2. FASD is the leading known cause of developmental delay in Canada.
 - a) True
 - b) False

SLIDE 79 (no narration)

Student quiz

- 3. If alcohol is completely avoided during pregnancy, the child will not have FASD.**
- a) True
 - b) False

SLIDE 80 (no narration)

Student quiz

- 4. It is okay/safe for a pregnant woman to have alcoholic drinks that are less strong (wine, beer, cocktails) than hard liquor (e.g., vodka, whiskey).**
- a) True
 - b) False

SLIDE 81 (no narration)

Student quiz

5. When is it completely safe for a woman to drink during her pregnancy?
- a) First 3 months (1st semester)
 - b) Mid-pregnancy (2nd semester)
 - c) Late pregnancy (3rd trimester)
 - d) All stages of pregnancy
 - e) It is not safe at ANY point in pregnancy

SLIDE 82 (no narration)

Student quiz

6. On average, what proportion of women drink alcohol during pregnancy in the general population of Canada?
- a) Less than 1%
 - b) Between 2-3%
 - c) Between 15-20%
 - d) Approximately 10%

SLIDE 83 (no narration)

Student quiz

7. In the general population of Canada, what proportion of individuals are affected by FASD?
- a) Less than 1% (less than 375,900 people)
 - b) Between 1-2% (between 375,900 and 751,800)
 - c) Approximately 4% (about 1.5 million people)

SLIDE 84 (no narration)

Student quiz

8. When a pregnant woman drinks alcohol, the alcohol can have a ____ effect on her baby, in the long-term?
- a) Behavioural
 - b) Social
 - c) Mental
 - d) Physical
 - e) All of the above

SLIDE 85 (no narration)

Student quiz

9. To help prevent FASD, it is necessary to:
- a) Completely avoid all alcohol (in any type/amount) when pregnant or at risk of becoming pregnant
 - b) Help our pregnant friends avoid alcohol
 - c) Use family planning/contraception if at risk of having an alcohol-exposed pregnancy
 - d) Educate others on the risk of alcohol in pregnancy
 - e) Provide support to those with addictions issues
 - f) Help pregnant women with addictions seek available supports
 - g) All of the above

SLIDE 86 (no narration)

Key message: Alcohol and pregnancy don't mix!

NO ALCOHOL IN
PREGNANCY
=
NO FASD IN THE
CHILD



SLIDE 87 (no narration)

Acknowledgements

- **This project was funded by the Public Health Agency of Canada (PHAC).**
- **The curriculum was adapted by the Principal Investigator, CAMH project team and project Steering Committee.**
- **This recording was narrated by Angela Geddes, MSW, RSW.**

SLIDE 88 (no narration)

Prevention of Alcohol Use in Pregnancy and Fetal Alcohol Spectrum Disorder (FASD) Lesson Plan Guide for Teachers of Health and Physical Education (Grades 7-12)

This lesson plan was developed by Centre for Addiction and Mental Health (CAMH) team as part of the project entitled: “*FASD Prevention school-based program for children and adolescents in select urban, rural and First Nations schools in Ontario, Canada*”, funded by the Public Health Agency of Canada (PHAC) Fetal Alcohol Spectrum Disorder (FASD) National Strategic Projects Fund.

LESSON PLAN OUTLINE

This lesson is an interactive set of modules, which are intended to raise awareness about detrimental consequences of alcohol use in pregnancy and Fetal Alcohol Spectrum Disorder (FASD), for students in Health & Physical Education classes in grades 7-12. FASD refers to a range of disorders that can affect individuals who were exposed to alcohol before birth. The following lesson plan aims to highlight the risks of alcohol use in adolescence, as well as the importance of abstaining from alcohol use before and during pregnancy. It is important to engage students in this preconception FASD prevention initiative, as this is a key period in which alcohol use and sexual risk behaviours are initiated.

Time requirement

This lesson plan is meant to be implemented in 3-4 consecutive days, approximately 55-65 minutes each class. The lesson time may vary depending upon the speed at which the material is covered and the degree of student participation.

Lesson Plan objectives

The objectives of this lesson plans are to provide students with evidence-based information on:

1. Impacts of alcohol use on teenage health
2. Impacts of alcohol use in pregnancy
3. The life course of individuals with FASD
4. Strategies to support substance-free pregnancies

Lesson Plan Contents

This curriculum includes:

1. Background information for teachers
2. Recording(s) of lesson plan lectures, consisting of 3 units
3. Step-by-step instructions for engaging with students during directed class discussions and in between units
4. Information resources for teachers

BACKGROUND INFORMATION FOR TEACHERS

Why teach about FASD?

Educational campaigns increase knowledge about the effects of prenatal alcohol exposure and are foundational to other levels of FASD prevention in Canada. Evidence-based strategies and activities that promote learning and well-being are provided in alignment with curriculum expectations and the *Foundations for a Healthy School* substance use-specific strategies and activities. The prevention of alcohol use in pregnancy is aligned with the WHO initiatives to prevent chronic diseases¹ and initiatives to reduce the harmful use of alcohol

¹ World Health Organization (2014a). WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020. Available from: [file:///C:/Users/16478/Downloads/9789241506236_eng%20\(1\).pdf](file:///C:/Users/16478/Downloads/9789241506236_eng%20(1).pdf)

globally.² Remarkably, it has been estimated that preventing one case of FASD incurs only 3% of the costs it would require to provide support services to individuals with FASD.³ FASD prevention initiatives, therefore, have the potential to save service systems considerable costs.

In Canada, public health agencies assert the message that there is no safe amount, no safe time, and no safe kind of alcohol to drink during pregnancy, which is endorsed by FASD researchers and Health Canada.^{4,5} This message is also displayed in obstetric guidelines⁵, and the Centre for Disease Control also endorses complete abstinence, adding that alcohol should be avoided in women who could become, or are trying to become, pregnant. Even with these public health efforts, an estimated 10% of pregnancies in Canada are alcohol-exposed⁶ and an estimated from 2.5%⁷ to 4% of Canadians in the general population have FASD⁸, which emphasizes the need for further prevention activities.

Why this age group?

Providing age-appropriate education before conception can help reduce the risk of alcohol-exposed births. Schools exercise a powerful influence over young people, making them ideal settings to educate about the dangers of drinking alcohol during pregnancy. Alcohol consumption rates are increasing among women of childbearing age, due to increased availability and advertising of alcohol. It is important to educate students, as rates of alcohol consumption are high among Ontario students and it has been shown that current attitudes and drinking behaviours tend to predict alcohol use in pregnancy later in life.⁹ Levels of alcohol consumption among young women in Canada are increasing, including binge drinking. In Ontario, 42.8% of girls in grades 7-12 reported past year alcohol use and 21.4% reported binge drinking in the past month.¹⁰ Between grades 7-12, alcohol use patterns increase over time; past-year alcohol use increases from 7.3% to 66% and past-month binge drinking increases from 1.1% to 28.2%, respectively.¹⁰ Alarming, in 2019, 15% of high school students (1 of every 7) reported symptoms consistent with a substance use disorder.¹⁰

² World Health Organization (2014b). Guidelines for the identification and management of substance use and substance use disorders in pregnancy. Available from: https://apps.who.int/iris/bitstream/handle/10665/107130/9789241548731_eng.pdf;jsessionid=528480BDEF513AE9130A22E5EB1C182E?sequence=1

³ Greenmyer, J. R., Popova, S., Klug, M. G., & Burd, L. (2019). Fetal alcohol spectrum disorder: A systematic review of the cost of and savings from prevention in the United States and Canada. *Addiction* (Abingdon, England), 115(3), 409-417.

⁴ Zizzo, N., & Racine, E. (2017). Ethical challenges in FASD prevention: Scientific uncertainty, stigma, and respect for women's autonomy. *Canadian Journal of Public Health-Revue Canadienne de sante Publique*, 108(4), E414-E417.

⁵ Graves, L., Carson, G., Poole, N., Patel, T., Bigalky, J., Green, R. C., Cook, J. L. (2020). Guideline No. 405: Screening and counselling for alcohol consumption during pregnancy. *Journal of Obstetrics and Gynaecology Canada*, 42(9), 1158-1173.

⁶ Popova, S., Lange, S., Probst, C., Parunashvili, N., & Rehm, J. (2017). Prevalence of alcohol consumption during pregnancy and Fetal Alcohol Spectrum Disorders among the general and Aboriginal populations in Canada and the United States. *European Journal of Medical Genetics*, special issue on updates in "Teratology and The Fetal Alcohol Spectrum Disorders", 60(1), 32-48. doi: 10.1016/j.ejmg.2016.09.010

⁷ Popova, S., Lange, S., Poznyak, V., Chudley, A.E., Shield, K.D., Reynolds, J.N., Murray, M., Rehm, J. (2019). Population-based prevalence of fetal alcohol spectrum disorder in Canada. *BMC Public Health*, 19(1), 845.

⁸ Thanh, N. X., Jonsson, E., Salmon, A., Sebastianski, M. (2014). Incidence and prevalence of fetal alcohol spectrum disorder by sex and age group in Alberta, Canada. *Journal of Population Therapeutics and Clinical Pharmacology*, 21(3), e395-e404.

⁹ Skagerström, J., Chang, G., Nilsen, P., Linköpings, U., & Hälsouniversitetet. (2011). Predictors of drinking during pregnancy: A systematic review. *Journal of Women's Health*, 20(6), 901-13. doi: 10.1089/jwh.2010.2216.

¹⁰ Boak, A., Elton-Marshall, T., Mann, R.E., Hamilton, H.A. (2019). Drug use among Ontario students: 1977-2019. Detailed findings from the Ontario Student Drug Use and Health Survey. Available from: https://www.camh.ca/-/media/files/pdf---osduhs/drugusereport_2019osduhs-pdf.

Using this lesson plan:

- As a teacher of a participating class in this project, your role will primarily be to facilitate discussions and student activities in this lesson plan. You may not use any of the activities for the purposes of assessing the student in the respective course you teach. These activities are part of the CAMH research project only.
- The following are key words used in this lesson plan, which you may want to be familiar with beforehand:
 - Fetal Alcohol Spectrum Disorder (FASD)
 - Prenatal
 - Addiction
 - Mental/behavioural disorders
 - Carcinogen
 - Toxin
 - Teratogen
 - Coping mechanisms/strategies
 - Social/peer pressure
 - Stigma
 - Disability
 - Developmental delay
 - Central nervous system
 - Abstinence
 - Tobacco
 - Cannabis
 - Opioids
 - Illicit drugs
 - Breastfeeding
 - Prevention
 - Misconception

LESSON PLAN

UNIT 1: Impacts of alcohol use on teen health

Estimated time: 65 minutes (45 minutes for pre-recorded lecture and 20 minutes for discussion)

Student learning objectives:

- Students should understand that alcohol impacts all bodily systems negatively (internal and external).
- Students should understand that alcohol is unhealthy at any age, but especially dangerous for youth as their brain is still developing.

- Students should be able to identify benefits to staying sober and strategies to turn down alcohol, if that is their choice.

Discussion questions and considerations

In this lesson plan, the content is pre-recorded, except for the following questions. Teachers are expected to ask the following questions (as directed) and facilitate discussion among students in the class.

1. **“What might influence teenagers to use alcohol and/or other substances?”**
 - a. If needed, prompt students to think of life circumstances, social/environmental context, and individual life changes
 - b. Encourage students to think broadly and to not identify themselves or their peers in any of the answers provided
 - c. Do not offer the students anecdotes or provide your own answers
 - d. Spend 2-3 minutes on this discussion and check to ensure all students have had a chance to provide an answer
2. **“Can you name some risks related to drinking alcohol?”**
 - a. Encourage students to reflect on what they have learned in biology and health studies, or what they have seen in the media.
 - b. Should the students include an anecdote in their answers, bring the discussion back and emphasize that no anecdotes should be given.
3. **“Which organs/systems of the body can be negatively affected by alcohol?”**
 - a. Encourage students to name at least 5 systems before moving onto the next slide.
 - b. If needed, provide “digestive system” as an example. Connect this to previous material you have taught, if applicable.
4. **“What are some benefits (health or other) of being/staying sober in the short-term or long-term?”**
 - a. Encourage students to name a range of benefits related to being alcohol-free and/or drug-free.
5. **“What are some healthier activities teens could choose instead of using alcohol or other substances?”**
 - a. Encourage students to provide a total of 10 activities before moving on.
 - b. Students should name healthy lifestyle choices such as exercise.

Considerations: Content

- Students will naturally tend to reflect on their own experiences and that of their peers, related to substance use and associated risks. If time permits, you may want to monitor students’ reactions to the content to see if they may benefit from follow-up lessons/activities later in the academic year.
- Though it is emphasized in the beginning of the recording, you may need to remind students to maintain a respectful learning environment and emphasize that no references can be made to past or present individual behaviours.

- For the purpose of this pilot study, please refrain from including your own views of alcohol and substance use until after all student data have been collected (you will be notified).
- If prompted by students to provide your own perspective or your own current substance use behaviours (e.g., “do YOU buy alcohol at the grocery store?”), please divert the attention to the purpose of this lesson plan and the significant impacts for youth.
- Some students in your class may use substances, and it is important that we provide them with the healthiest choice (i.e., zero alcohol and other substances is best) using gentle language.

UNIT 2: Impacts of alcohol use in pregnancy and Fetal Alcohol Spectrum Disorder (FASD)

Estimated time: 55 minutes (45 for pre-recorded lecture and 10 minutes for discussion)

Student learning objectives:

- Students should understand that alcohol is harmful to the developing brain and other organs of the fetus, and it may cause FASD, the most dramatic manifestation of prenatal alcohol exposure.
- Students should demonstrate an understanding of the multiple different factors (such as peer pressure; pregnancy planning; relationship/family dynamics; psychological trauma; limited access to healthcare/education), which may lead to alcohol use during pregnancy.
- Students should demonstrate a clear understanding that pregnant women should completely abstain from alcohol and other drugs during pregnancy.
- Students should understand that FASD is a lifelong disability, with many physical, mental and behavioural problems to individuals who have the condition.

Discussion questions and considerations

Teachers are expected to ask the following question (as directed) and facilitate discussion among students in the class.

1. **“Can you think of what may influence some women to drink alcohol while they are pregnant?”**
 - a. If needed, prompt students to think of life circumstances, social/environmental context, and individual life changes.
 - b. Encourage students to think broadly, to not use personal stories or the experiences of anyone they may know, in their answers.
 - c. Only in the case that students mention “abortion” as a potential reason for drinking alcohol while pregnant (a misconception), please emphasize to students that this is largely a myth and that large amounts of alcohol don’t necessarily cause an “abortion” (rarely, if ever), but can actually be very harmful to a pregnant woman and her baby.

- d. In case students use the term “alcoholics”, encourage them to use different phrasing such as “individuals with alcohol addiction”. Using the latter term emphasizes that people are not defined by their struggles.

Considerations: Content

- In general, this unit teaches about pregnancy, which therefore implicitly focuses on romantic relationships where a pregnancy can happen. Please be mindful that students may have different gender identities and sexual orientations, so it is important to use inclusive language in discussions, where possible and as appropriate.
- Students may naturally think about their own possible prenatal exposures. They may also try to “self-diagnose” themselves or their peers with possible FASD. This is typical behaviour upon first being introduced to FASD and should not be a cause for concern in and of itself. If needed, it may benefit students to explain that prenatal alcohol exposure occurs relatively often and does not necessarily cause FASD. As well, there may be some protective factors that have mitigated the risk of FASD in students (e.g., nutrition).
- Based on current statistics, it is possible that 1 out of 25 students may have FASD. Therefore, the language in the lesson plan has been made to be as strengths-based as possible and is non-stigmatizing, which is intended to foster respect and support of people with disabilities from classmates.
- In this unit, students are only shown pictures of mice with prenatal alcohol exposure and the associated facial features. It is possible, however, that students may already be familiar with the human facial features of FAS or may start to Google this concept or discuss it in the class. If this behaviour occurs, make it clear to students that only a trained professional (usually medical doctor) can identify these features by using special tools like rulers or software. In addition, only a small percentage (less than 10%) of individuals with FASD may have these facial features.
- This unit discusses mental, behavioural and learning problems related to FASD. It may be useful to make it clear to students that these issues are not only associated with FASD but could also be indicative of other medical conditions or life experiences.
- Students may comment on the appearance of individuals with FASD shown in photos or videos in this unit. Encourage students to keep such conversations respectful, while possibly emphasizing that people with FASD indeed look different, from person to person.
- This unit also briefly discusses the risks of alcohol use while breastfeeding. Students may have heard of a “pump and dump” technique, but this is beyond the scope of this lesson plan. If this point is raised, simply emphasize that all women metabolize alcohol differently, and that the safest (most ideal) choice is to abstain from alcohol while breastfeeding.

UNIT 3: Supporting alcohol-free and drug-free pregnancies

Estimated time: 25 minutes (15 minutes for pre-recorded lecture and 10 minutes for discussion)

Student learning objectives:

- Students should understand that FASD prevention is a shared responsibility between partners, families, and communities.
- Students should be able to identify common misconceptions about alcohol use in pregnancy and how to refute such ideas with evidence-based responses
- Students should be able to identify ways in which they can support alcohol-free pregnancies, now and later in life.

Discussion questions and considerations

Teachers are expected to ask the following question (as directed) and facilitate discussion among students in the class.

1. **“Thinking back to what may influence women to drink alcohol during pregnancy, what are some ways we can help pregnant women abstain from alcohol and other drugs?”**
 - a. If needed, prompt students to think of what they can do or say when a family member or friend is pregnant that would support abstinence in a respectful way.
 - b. Encourage students to speak hypothetically instead of offering personal anecdotes.

Considerations: Content

- If needed, emphasize to students that no woman wishes to intentionally harm her unborn baby, and that blaming or shaming pregnant women for substance use is ineffective for preventing FASD.
- In this discussion, emphasize the need for students to be good role models by making healthy choices such as abstaining from alcohol use themselves.
- After the completion of Unit 3, emphasize to students that they have a large role to play in spreading FASD awareness with all the information they have just learned. For example, students can actively refute common misconceptions about alcohol use in pregnancy in any conversations, not necessarily only with pregnant women.

CASE STUDY ACTIVITY

Estimated time: 20 minutes

Learning objectives:

To strengthen the students' decision-making skills and enable them to state alternative options to scenarios dealing with alcohol use and pregnancy.

Directions:

1. Divide students into groups (or break-out rooms if the class is online), use as a class discussion OR use as an independent assignment
2. Ask the students to analyze each scenario and answer the related questions.

Case Study 1: Smita

Smita and her husband John have recently decided to try to become pregnant. With their decision in mind, Smita has been taking precautions to prepare herself for a healthy pregnancy. On New Year's Eve, she and her husband attend a party where people are drinking heavily. "Oh, come on, silly," her friend Nikki laughs. "One drink won't hurt you!"

Possible "correct" answers can include:

1. **Identify the decision Smita needs to make.**
 - Ultimately, Smita needs to decide if she can or should hold her ground in abstaining from alcohol while trying to get pregnant. There is a risk of prenatal alcohol exposure if she is already pregnant at this party and does not know it. While drinking one drink may not "hurt" Smita, it may hurt an unborn child.
 - While it is ultimately up to Smita to make her own choice and voice her decision, preventing alcohol use during pregnancy is actually a shared responsibility for this couple. John can be supportive to Smita by encouraging her to make the safest choice possible (i.e., abstain from alcohol) and by also abstaining from alcohol during this New Year's Eve party.
2. **Identify options and possible consequences.**
 - Smita can say she does not feel like drinking. That way, she can keep it a secret that she is trying to get pregnant, and she can keep her baby safe in case she already is pregnant.
 - If she feels comfortable, Smita can simply tell her friend Nikki that she is trying for a baby and does not want to drink alcohol, just in case. If Nikki still says one drink will not hurt, Smita can clarify that alcohol can negatively impact the fetus even within 2-3 days of conception.
 - This is also an opportunity for John, Smita's partner, to jump in and support this decision, advocating for the safest choice to be made based on public health messaging.
 - To take the emphasis off Smita and her choices, John can emphasize that it is THEIR decision as a couple. He can explain that they both decided to abstain from alcohol during the pregnancy and he wants to support Smita and the growing baby.
 - John can also add that Nikki should be supportive of this couple's decision to have an alcohol-free pregnancy.

- If Nikki already knows that Smita is trying for a baby and already knows that Smita is abstaining from alcohol for that reason, Smita should have a private conversation with Nikki about respecting her boundaries.
- Ideally, Smita and John should discuss how to approach this situation beforehand, but if they have not, then they should certainly do so following this scenario. As we know, the pressures to drink alcohol in social settings and on special occasions is significant, and they may encounter this situation again.

Case Study 2: Aidan

“Aidan is a college student. His older sister Megan recently announced that she is pregnant with her first child. Aidan invites Megan out to dinner to celebrate. He starts to order a bottle of champagne, but Megan protests, “I can’t drink because I’m pregnant.” Aidan is confused and hurt that she will not celebrate with him.”

Possible “correct” answers can include:

1. Identify how Megan could respond to Aidan.

- Megan can tell her brother (Aidan) that her decision to not drink alcohol is the healthiest, safest choice for herself and her baby, and not anything personal about not wanting to celebrate with him.
- Megan can suggest other ways to celebrate, such as non-alcoholic drinks or dessert, that would be a healthier choice for herself and the baby.
- Megan can take this opportunity to tell Aidan that alcohol-free pregnancies should be respected and encouraged, as FASD prevention is everyone’s responsibility.

2. Discuss the possible options and consequences.

- There may be a conflict if Aidan suggests that alcohol is okay to consume during pregnancy, which Megan knows is not true. Megan can explain to him everything she knows about the risks of alcohol use during pregnancy, stating there is no safe type or amount of alcohol to drink at any point during pregnancy.
- The two siblings can compromise: Aidan can drink champagne and Megan can toast with a glass of water. However, the most supportive action from Aidan would be to stay sober with Megan.
- The two siblings can talk about other things that will have to change during Megan’s pregnancy, such as avoiding hot tubs and sushi.
- This may also be a good time for Megan to set a boundary and explain to Aidan that she will abstain from alcohol not only during pregnancy, but also during breastfeeding of the baby.

Case Study 3: Michelle

Michelle has just found out that she is pregnant. During her routine doctor visit, Michelle mentions to her doctor that she has heard that drinking alcohol while pregnant can harm her baby. Her doctor tells her that having a few drinks occasionally will not be harmful to the baby. She is uneasy with his response and leaves with mixed feelings.

Possible “correct” answers can include:

1. What should Michelle do?

- Michelle can (and should!) get a second opinion. She is absolutely correct in that alcohol during pregnancy can be harmful to the fetus.
- Michelle can understand that the opinion expressed by her doctor is based on outdated knowledge, and that now there is a lot of scientific evidence showing that alcohol CAN be harmful to the baby. She may want to take this opportunity to refer to the newest Canadian guidelines, which state there is no safe type, amount, or time to drink alcohol during pregnancy, while breastfeeding, or when trying to become pregnant.

2. Identify options and possible consequences.

- If Michelle would follow this unprofessional doctor’s advice, her chances of delivering a baby with FASD or with other health problems due to alcohol exposure are very high.
- The safest choice for Michelle is to stay completely free from drinking any types and any amounts of alcohol during all 9 months of pregnancy. In this case her baby will not have an FASD or any other alcohol-related malformations.
- After reading the Canadian expert guidelines, Michelle will find out that abstaining from alcohol while breastfeeding can also be harmful to the baby. Michelle can be prepared for any conflicting, incorrect advice that others may give her on this topic, including unprofessional doctors.

STUDENT QUIZ

Estimated time: 10 minutes

Directions:

1. Distribute the quiz to all students in the class (paper forms if in-person teaching; through a Zoom poll if the class is online).
2. Instruct the students to work through the quiz independently or in groups in class, if time would permit. Alternatively, these questions can be assigned as a take-home quiz.

The following are the quiz questions, with the correct answer highlighted.

1. One can always identify a child with FASD by the way they look.
A. True
B. False (correct answer)
2. FASD is the leading known cause of developmental delay in Canada.
A. True (correct answer)
B. False
3. If alcohol is completely avoided during pregnancy, the child will not have FASD.
A. True (correct answer)
B. False
4. It is okay/safe for a pregnant woman to have alcoholic drinks that are less strong (wine, beer, cocktails) than hard liquor (e.g., vodka, whiskey).
A. True
B. False (correct answer)
5. When is it completely safe for a woman to drink during her pregnancy?
A. First 3 months (1st semester)
B. Mid-pregnancy (2nd semester)
C. Late pregnancy (3rd trimester)
D. All stages of pregnancy
E. It is not safe at ANY point in pregnancy (correct answer)
6. On average, what proportion of women drink alcohol during pregnancy in the general population of Canada?
A. Less than 1%
B. Between 2-3%
C. Between 15-20%
D. Approximately 10% (correct answer)
7. In the general population of Canada, what proportion of individuals are affected by FASD?
A. Less than 1% (less than 375,900 people)
B. Between 1-2% (between 375,900 and 751,800)
C. Approximately 4% (about 1.5 million people) (correct answer)

8. **When a pregnant woman drinks alcohol, the alcohol can have a ____ effect on her baby, in the long-term?**
- A. Behavioural
 - B. Social
 - C. Mental
 - D. Physical
 - E. All of the above (correct answer)
9. **To help prevent FASD, it is necessary to:**
- A. Completely avoid all alcohol (in any type/amount) when pregnant or at risk of becoming pregnant
 - B. Help our pregnant friends avoid alcohol
 - C. Use family planning/contraception if at risk of having an alcohol-exposed pregnancy
 - D. Educate others on the risk of alcohol in pregnancy
 - E. Provide support to those with addictions issues
 - F. Help pregnant women with addictions seek available supports
 - G. All of the above (correct answer)

AFTER the lesson plan:

FASD and PAE prevention is a key public health issue, and students in Grades 7-12 would greatly benefit from additional lessons and activities in this area.

One example of an activity to be used after the lesson plan:

- Students can get into groups of 3-4 or work independently.
- Students are to create a mock advocacy project that educates the public about FASD. Projects may take the form of a pamphlet, poster, newspaper article, radio or television public service announcement (PSA), and a letter to the editor, etc.
- The project must be persuasive, take a clear stand – “no known amount of alcohol is safe!”.
- Students are encouraged to use what they have learned to create a persuasive message that addresses common misconceptions about the negative effects of alcohol consumption during pregnancy. This may include increased availability and access to alcohol, as well conflicting messages from alcohol industry advertising.

RECOMMENDED RESOURCES FOR TEACHERS

***The following resources can provide you with more information about alcohol use and FASD that you can use in your teachings as an education practitioner:**

Alberta Partnership on Fetal Alcohol Syndrome (2002). Teaching for the Prevention of Fetal Alcohol Spectrum Disorder (FASD), Grades 1-12. A Resource for Teachers of Health and Life Skills, and Career and Life Management. <https://static.fasdoutreach.ca/www/images/print-thumbnails/teaching-prevention-fetal-alcohol-spectrum-disorder-grades-1-12/fas.pdf>

Boak, A., Elton-Marshall, T., Mann, R.E., Hamilton, H.A. (2019). Drug use among Ontario students: 1977-2019. Detailed findings from the Ontario Student Drug Use and Health Survey. https://www.camh.ca/-/media/files/pdf---osduhs/drugusereport_2019osduhs-pdf.

Canada FASD Research Network (2019, July). FASD Basic Information and Fact Sheet. <https://canfasd.ca/wp-content/uploads/2019/11/FASD-Basic-Information.pdf>

Canada FASD Research Network (2019, November 2). FASD 101: Talking to the Media About Alcohol, Pregnancy, and Fetal Alcohol Spectrum Disorder. <https://canfasd.ca/wp-content/uploads/2019/11/2-FASD-101-5.pdf>

Canada FASD Research Network (2019, November). Language Matters: Talking about Fetal Alcohol Spectrum Disorder (FASD). <https://canfasd.ca/wp-content/uploads/publications/Language-and-Images-Matter.pdf>

Canada FASD Research Network (2021, February). Common Messages: Guidelines for Talking & Writing About FASD. <https://canfasd.ca/wp-content/uploads/publications/Common-Messages-EN.pdf>

Canada Northwest FASD Partnership (2016, November). Language Guide: Promoting dignity for those impacted by FASD. <https://www.fasdcoalition.ca/wp-content/uploads/2016/10/LAEO-Language-Guide.pdf>

Flannigan, K., Unsworth, K., & Harding, K. (2018). The prevalence of Fetal Alcohol Spectrum Disorder. Canada FASD Research Network. Canada. <https://canfasd.ca/wp-content/uploads/publications/Prevalence-1-Issue-Paper-FINAL.pdf>

Flannigan K, Hardy K, Reid D, Family Advisory Committee. (2018). Strengths among individuals with FASD. <https://canfasd.ca/wp-content/uploads/2018/10/Strengths-Among-Individuals-with-FASD.pdf>

Government of Canada. Public Health Agency of Canada. (2007). What is Fetal Alcohol Spectrum Disorder? (PHAC Publication Cat. HP35-4/2007). <https://www.phac-aspc.gc.ca/hp-ps/dca-dea/prog-ini/fasd-etcaf/publications/pdf/factsheet1-fasd-etcaf-eng.pdf>

Harding, K., Flannigan, K. & McFarlane, A. (2019, July). Policy Action Paper: Toward a Standard Definition of Fetal Alcohol Spectrum Disorder in Canada. Canada FASD Research

Network. Canada. <https://canfasd.ca/wp-content/uploads/2019/08/Toward-a-Standard-Definition-of-FASD-Final.pdf>

Healthy Child Manitoba & Manitoba Education, Citizenship and Youth. (2009). What Educators Need to Know about FASD: Working Together to Educate Children in Manitoba with Fetal Alcohol Spectrum Disorder. Winnipeg, Manitoba, Canada.

https://www.vitalitenb.ca/sites/default/files/fasdeducators_en.pdf

Morrison, K., Harding, K. & Wolfson, L. (2019, August). Individuals with Fetal Alcohol Spectrum Disorder and Experiences of Stigma. Canada FASD Research Network. Canada.

<https://canfasd.ca/wp-content/uploads/publications/Individuals-with-FASD-and-Experiences-of-Stigma-FINAL.pdf>

Wolfson, L., Harding, K. & Poole, N. (2019, May). The Role of Partners in Fetal Alcohol Spectrum Disorder Prevention. Canada FASD Research Network. Canada.

<https://canfasd.ca/wp-content/uploads/2019/08/the-role-of-partners-in-fetal-alcohol-spectrum-disorder-prevention.pdf>

Zieff, C.D., Schwartz-Bloom, R.D. (2008). Understanding Fetal Alcohol Spectrum Disorders (FASD): A comprehensive guide for Pre-K – 8 Educators. FASD-Rise at Duke University.

https://sites.duke.edu/fasd/files/2016/04/FASD_Guide.pdf

Relevant training courses from Canada FASD Research Network available for purchase:

1. Foundations in FASD. <https://estore.canfasd.ca/foundations-in-fasd>
2. FASD for School Staff Level II: Practical Strategies for the School Environment (Online Training Course). <https://estore.canfasd.ca/fasd-for-school-staff-level-ii>



SLIDE 1

Welcome everyone to this course that will teach us how to promote and have healthy pregnancies in our communities, and how to prevent Fetal Alcohol Spectrum Disorder, or FASD. Specifically, this lesson will explore the risks associated with alcohol use in general and during pregnancy, including FASD.

At the end of this course, you will have more information that will help you to make informed decisions, move forward and work towards achieving balance, resilience and wholistic wellness. This lesson plan will prepare you for decisions you will need to make regarding pregnancy and birth later in life, when you are older and ready to start a healthy, happy family.

opening prayer and drum

Content disclaimer



- All concepts presented are based on the most up-to-date scientific information.
- This presentation includes information and imagery related to negative impacts of alcohol and substance use, in general and in pregnancy, including Fetal Alcohol Spectrum Disorder (FASD).
- In balance and harmony with the Seven Grandfather teachings we are respectfully asking that all those present be mindful of the following ground rules:
 - Respectful behaviour at all times
 - Raise your hand if you have a question
 - Be kind and considerate to whomever is talking or sharing
 - We are all in this together, and education and awareness is empowerment, and teach us to be accepting of this knowledge in a good way



SLIDE 2

We'd like to start by offering a brief disclaimer around the content of this presentation. All of the information and concepts presented in this material are based on the most up-to-date and scientific information.

Aniin, Nin Din Away Maa Gan Odok, Adik Inini Indiigo, Ron Linklater N'dizhnakaz, Adik N'Dodem, Couchiching N'Donjii, Thunder Bay, Indayaa, Ni Minwendaam Gi Bi Ganoon Nagook.

Hello All my Relations! I am called Caribou Man, my name is Ron Linklater, my clan is Caribou, I am from Couchiching, I live in Thunder Bay. I'm very happy to speak to you!

Our teachings come from Creator – and our people have words that speak about laws, Inakonigaywin – are our word for laws – Gagage Inakonigaywin translates to eternal laws and Katay Inakonigaywin means ancient laws and our belief is that these laws came from Creator – Gi Zhay Manido – and they give us ideas and philosophy and tell us how to live our life and how to be good people.

This presentation includes information and imagery related to some of the negative consequences resulting from alcohol and substance use in general and specifically in pregnancy. These discussions will focus on the risks associated with alcohol use in pregnancy and fetal alcohol spectrum disorder and it's really important to understand that this content may be sensitive to some.

Therefore, it's really important for all of us to create a safe, inclusive and positive space that's comfortable for all and be respectful to other people's ideas and beliefs and understandings that we all come with.

In balance and harmony with the Seven Grandfather teachings we are respectfully asking that all those present be mindful of the following ground rules:

- Respectful behaviour is important at all times

- Raise your hand if you have a question
- Be kind and considerate to whomever is talking or sharing
- We are all in this together, and education and awareness is empowerment, and teach us to be accepting of this knowledge in a good way



Lesson plan outline

1. Impacts of alcohol use on wellness
2. Impacts of alcohol use in pregnancy
3. What is Fetal Alcohol Spectrum Disorder (FASD)?
4. Supporting alcohol-free and drug-free pregnancies
 - a) Strategies to support others
 - b) Case-scenario activity
 - c) Student quiz



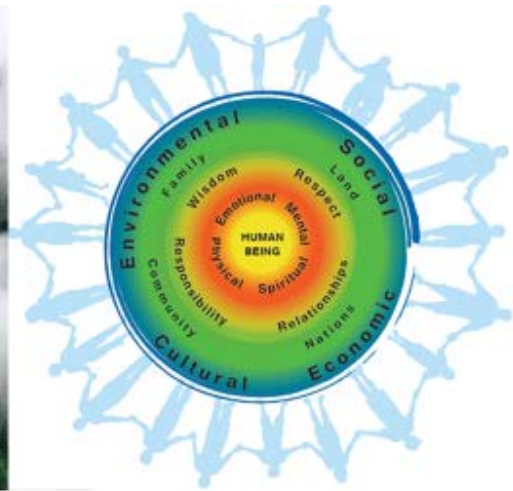
SLIDE 3

We will begin by providing you with a bit of an overview of what this Lesson plan will focus on. There are 3 units in total. In the 1st Unit we'll start by discussing the impacts alcohol use on wellness in general, including spiritual, physical, mental and emotional wellness.

In Unit 2 We learn about the negative impacts of alcohol use during the pregnancy on the development of the fetus. We will also talk about fetal alcohol spectrum disorder, or FASD.

In Unit 3 we will explore together ways that we can support alcohol and drug free pregnancies because we do believe that it's up to all of us to ensure that pregnancies are as healthy as they can be. We will be discussing strategies that we can support one another ... our peers ... our family members... Our partners.

At the end of the course there will be some case scenarios and activities as well as some group discussions that will help bring this information to life and of course there will be little quizzes to make sure that this information is resonating and that it's going to stick with us.



UNIT 1

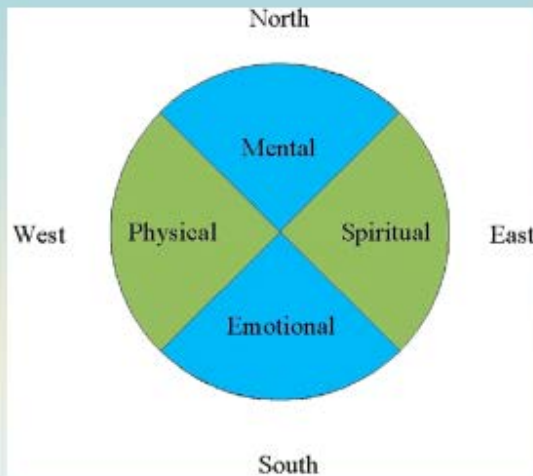
Impacts of alcohol use on wellness



SLIDE 4

All right let's begin. In Unit 1 we will be talking about the impacts of alcohol use on wholistic wellness

Teachings and Perspectives about Wholistic Wellness



“The four directions—the physical, the mental, the emotional, and the spiritual—are all necessary to mental wellness at the individual, family, and community level.”

- Elder Jim Dumont



SLIDE 5

When we talk about wellness, there are four aspects, or directions, typically discussed among individuals from Indigenous backgrounds.

Elder Jim Dumont who is Ojibwe Anishinaabe of the Marten clan, and originally from the Shawanaga First Nation on Eastern Georgian Bay, talks about these teachings and perspectives about wholistic Wellness. These four directions are all necessary to achieve and maintain Wellness at the individual, family and community levels. The language I speak, Anishinaabemowin, also known as the Ojibwe language, there are many different dialects of this beautiful, rich language, but they all say so many powerful concepts about wellness. For instance, another way to understand “wellness” is using the word “Mino Pimatsiwin” which means “living a good life” or another word is “Mino Ayaa Win” refers to a very positive well-being. These are all powerful concepts to understand about wholistic wellness and how important teachings are when we talk about FASD. In our language, the word for “teachings” is “Kikiinomaagewin” and they're all powerful, and they're old and ancient, and they can be used in modern-day times.

Discussion question

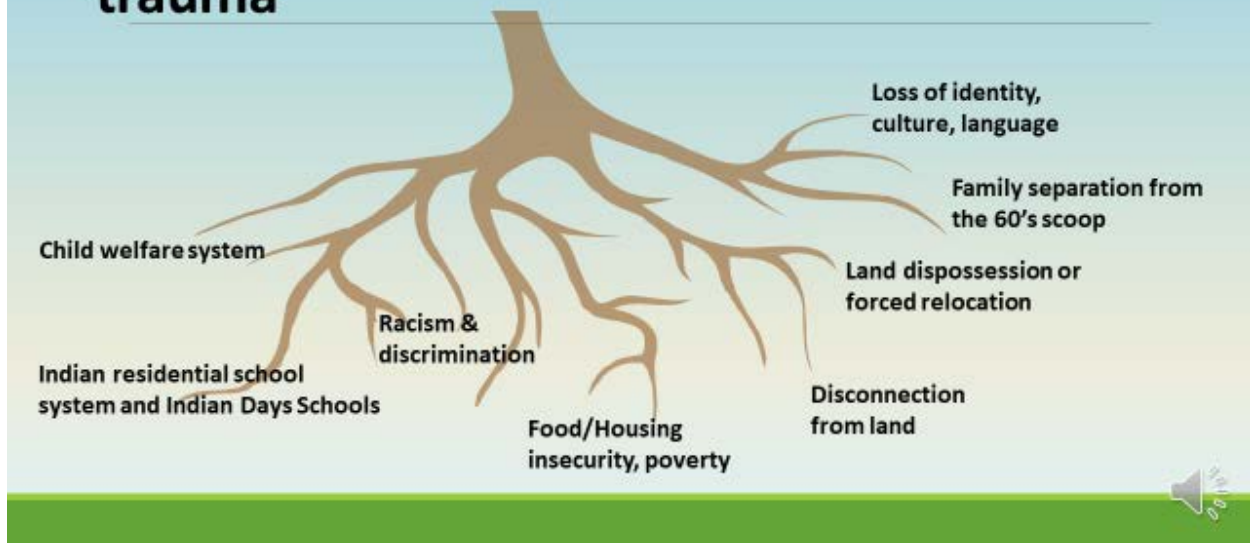
What are some reasons why you think teenagers or youth might drink alcohol or use other substances?



SLIDE 6

So, we'll start this unit with a discussion question circling around influences around alcohol use. Your teacher can now press pause to read the question to the class and guide this discussion.

Alcohol use is rooted in intergenerational trauma



SLIDE 7

Anishinaabek People have constitution in other words laws that govern the Nation and Anishinaabek People believe that these laws come directly from Creator and the word for the ancient law is called Katay Inakonigaywin and the word for eternal law comes from the word Gagage Inakonigaywin it is from here that Anishinaabek People were able to have flourishing prosperous healthy Nations for thousands of years and there was really no concepts of addiction as we know it today in the olden times we only see that after the arrival of European and Settler peoples the belief that Indigenous People have and the Anishinaabek word for hope is Baagosandan in other words Baagosandamowin is having hope and this is how the people were able to allow themselves to be healthy because their ceremonies and their teachings came from these ancient laws and these eternal laws.

We must understand that the cultural and historical context of Indigenous communities shape the four aspects of community members' individual and collective wellness. When there are long patterns of that wellness being disrupted across generations, this is known as intergenerational trauma. Many Indigenous peoples feel they carry their ancestors' trauma in their own beings today. This intergenerational trauma is the result of several societal factors that may still impact Indigenous families and communities for today, including:

- Interactions within the child welfare system and family separation
- The Indian residential school system and the Indian Days Schools, which have many survivors today of all ages, who have to cope with their experiences and memories. This is especially relevant in recent months, as unmarked graves are being discovered on the former grounds of residential schools. Sadly, these children did not have the chance to keep or even pass on their cultural traditions, and this has had a huge negative impact on all Indigenous peoples in Canada.

- Racism and discrimination against Indigenous peoples, including systemic discrimination (for example the residential school system) and also facing micro-aggressions from non-Indigenous individuals
- Of course, Indigenous peoples in Canada are disproportionately facing food and housing insecurity – with precarious living conditions, unclean, unsafe water and inflated food prices for basic groceries in some communities. These situations are indicators of poverty, which is a major barrier to good health outcomes
- Most notoriously is the land dispossession and forced relocation that Indigenous peoples have experienced for centuries as colonization has prevailed and conditions of Treaties have not been honoured in Canada
- In the 1960's there was a large, well-documented "movement" where many children were separated from their families, known as the Sixties Scoop. Being with our families is core to our wellness, and this opportunity was taken away from many Indigenous children.
- As a result of all of these barriers to wellness for Indigenous people, there has been a loss of identity, culture and Indigenous language over time among new generations. Traditions are not being passed down in the appropriate way and this is a barrier to spiritual wellness especially.
- It is important to understand one thing – MOST Indigenous people do NOT drink alcohol. It is a common misconception that Indigenous people drink alcohol more than the rest of the population in Canada.
- Many of our cultures has never had alcohol as a form of usage in the culture. In other words, Indigenous peoples never had brewing traditions. Some of the original writings that the explorers and the Jesuit priests when they wrote about alcohol use among the indigenous people, they found that the indigenous people themselves did not like the effects of alcohol. In the Anishinaabemowin, language there's actual teachings that speak about alcohol usage when it comes to FASD and one way the people talked about it is they said this "Gaa Win Minikway Ish Ko Day Waa Bo" - which literally translates to "don't drink the Firewater". So, our ancestors were very intelligent when it came to their knowledge about alcohol and how they knew they could prevent FASD by simply not drinking
- Unfortunately, those Indigenous people who DO drink alcohol, they're more likely to drink in more hazardous pattern – drink in binges. Some of them have an alcohol addiction, or alcohol use disorder.
- Many communities are alcohol-free, and many Indigenous people choose to abstain from alcohol. Alcohol is seen as a spirit that must be respected and honoured. Using alcohol excessively or improperly takes us away from our wellness.
- Unfortunately, as a result of intergenerational trauma, the small proportion of Indigenous peoples who consume alcohol do often have problems with alcohol addiction. This can all be understood through the lens of intergenerational trauma.

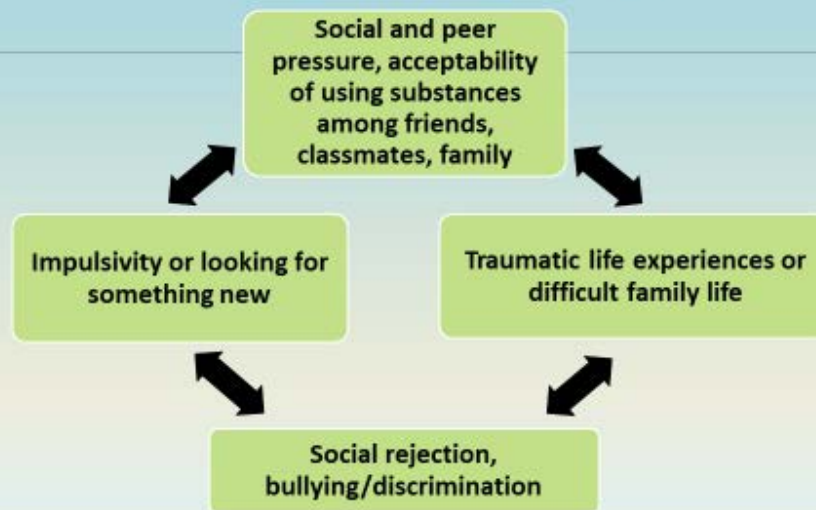
Video: “Colonization and our communities”



SLIDE 8

We will now take a moment to watch a video from the Canadian “We Matter” campaign, about the effects of colonization in our communities today.

Factors influencing alcohol/drug use in teens



SLIDE 9

Alcohol seems to be just about everywhere so some of the factors influencing alcohol and drug use in teenagers in particular are:

- Social and peer pressure, as mentioned, alcohol seems to be everywhere in our society, so there is a general sense of acceptance that many people use it, This acceptability seems to filter through among friends, classmates and family members.
- So, there's commonly alcohol use within social circumstances, but some people think that alcohol and other substances may help them to cope with some distressing circumstances. For example, some traumatic life experiences and difficult family life can lead people to use or misuse alcohol and other substances
- as can the feeling of social rejection - bullying and or discrimination of any kind for examples.
- Then there's also the fact that some of us are just a little more impulsive by nature and we're looking for something exciting or something new to do.

In summary, all of these factors influence each other. A teen might be looking for something new and might try a substance impulsively if presented the opportunity and this may be influenced by a family life or traumatic life experience and in some cases teens may use substances as just as a distraction or as an escape from these circumstances. In some cases, children have had a difficult family life also tend to experience feelings of isolation and that along with bullying and discrimination in school and other settings may lead to substance use and abuse. A teen may also start drinking alcohol or using other substances that they see their friends their family members or their classmates doing this especially, as we mentioned if it's at a party or in a social setting.

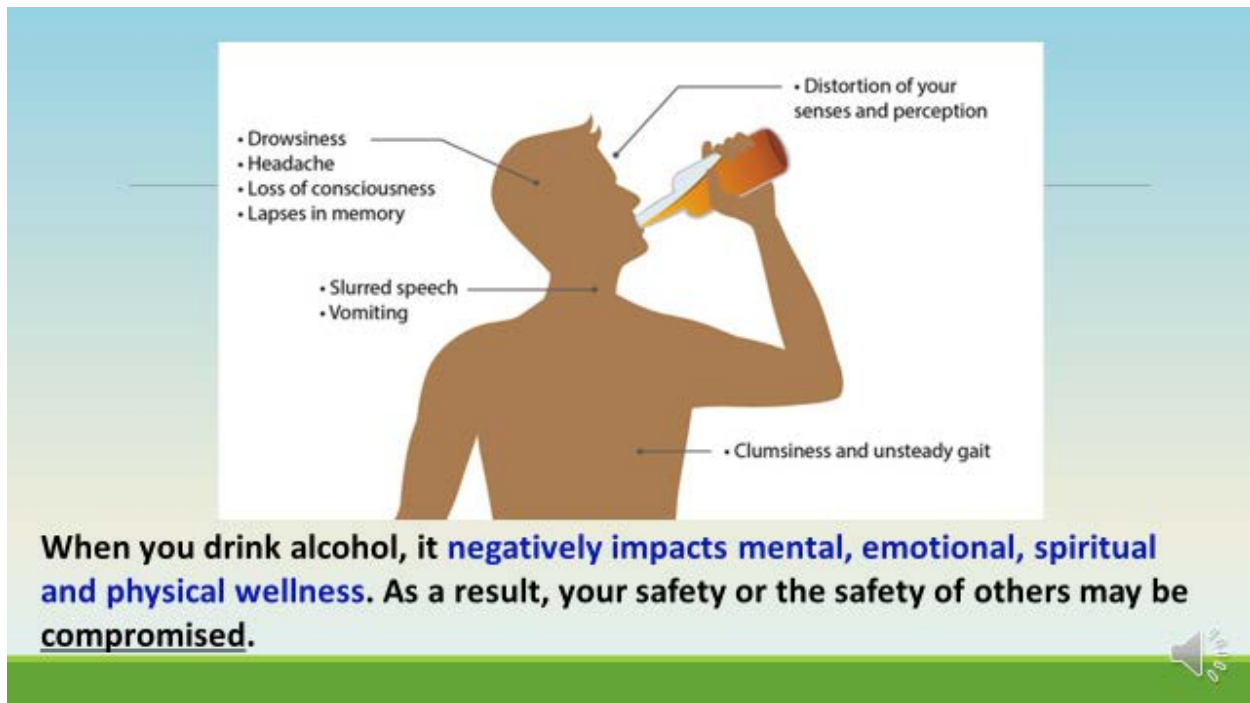
Discussion question

1. Can you name some impacts on wellness related to drinking alcohol?
2. Which organs/systems of the body can be negatively affected by alcohol use?



SLIDE 10

Let's take some time to think about and discuss. We will be following up with some evidence and specific discussion points as we move along. This discussion is an opportunity for us to explore what we already know and provides us with an opportunity to explore what we need to learn more about. Your teacher can now press pause to read the questions to the class and guide this discussion.



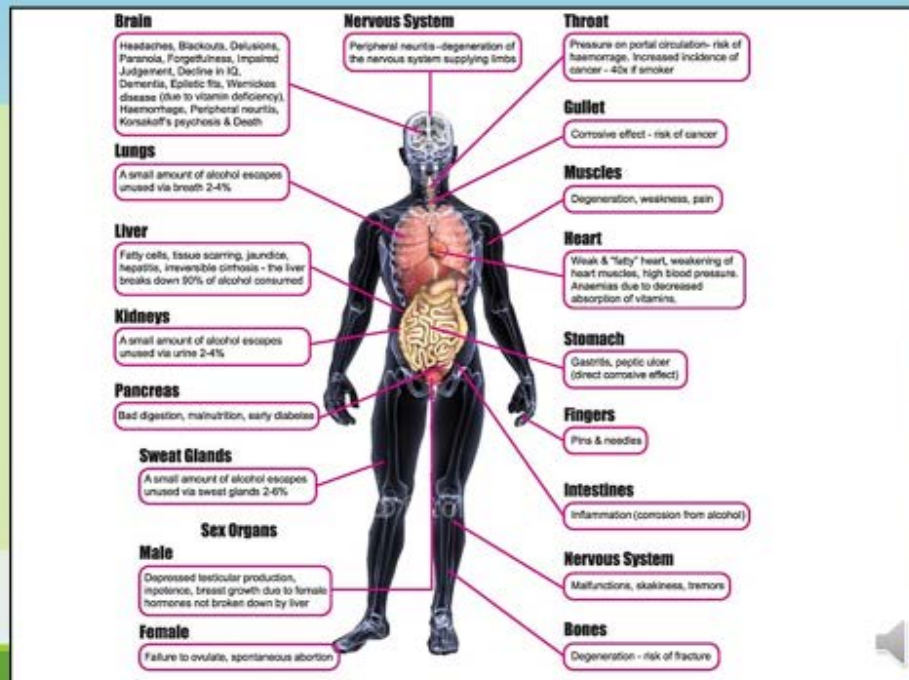
SLIDE 11

When we drink alcohol it's really important to understand that it really does negatively impact our mind our behavior and overall well-being. As a result, in many cases our safety and the safety of others can be compromised. Things like drowsiness, a headache, loss of consciousness, for example, with significant alcohol use. Memory mix-ups or lapses, sometimes there is slurred speech, lots of times there's vomiting associated with heavy alcohol use, and there's just this common distortion of our senses and our perception and how we see the world while under the influence. I.e., "he has his beer muscles on" or "they have liquid courage". Some people act quite differently while under the influence and often in ways that are not in line with their actual values.

There can be clumsiness and an unsteady way of walking and sometimes this really sneaks up on people quickly. For example, alcohol that really tastes good on a hot summer day for example may go down very quickly because it is refreshing... You may not realize how much you drank, and how quickly it has affected you until you go to stand up and your blood starts moving and going through your system. Accidents can and do happen during these times.

These are the immediate and short-term effects of drinking alcohol that many of us are quite likely familiar with. Of course, where there is intoxication and alcohol poisoning all the effects are more severe and may require hospitalization and these can lead to very serious injuries. Some other possible consequences of alcohol in the short term may also include dangerous or impulsive behaviors such as fighting, sexual risk behaviors such as unsafe sex or injuries or impaired driving.

Alcohol negatively affects ALL systems and organs of the human body



SLIDE 12

It's really important to understand that alcohol is a toxin that negatively affects all systems and organs of the human body and obviously the more alcohol is consumed, the higher the risk and the more damage that's being done. For example, as listed here, the brain is obviously affected. Often there are headaches and blackouts and delusions and paranoia and memory loss and impaired judgment ... we are further away from achieving our mental and physical wellness and become imbalanced overall. These effects also go beyond just the period where you're under the influence. With long-term use of alcohol, and especially heavy use of alcohol, there can be early onset of dementia for example sometimes there's epileptic seizures; brain bleeds, etc. Our central and peripheral nervous systems are affected and as indicated in the slide there could be a degeneration of the nervous system supplying the limbs.

It is also well-known, that alcohol is a carcinogen, which means it can cause many types of cancer such as mouth, throat, breast and lung cancer. Alcohol use can make our muscles degenerate ... our heart can become weaker as it has more fat kind of lingering around it weakening the heart muscles ... Alcohol can cause or lead to high blood pressure while the stomach can be at more risk of ulcers and inflammation in general. ... Our fingers and other extremities might experience a sensation of pins and needles that result from poorer circulation. We may experience some tremors and some shakiness, which is related to the idea that our bones can degenerate as alcohol eats away at the calcium and we can be at higher risk of fractures. For men and boys, there could be decreased testosterone production and impotence, as well as breast growth due to female hormones not broken down properly by the liver. Females, on the other hand, can have difficulty ovulating and having children.

Alcohol can escape through our sweat glands and can lead to poor digestion and malnutrition and maybe even some early diabetes. When our body breaks down alcohol, it

forms a toxic substance and this can travel straight out of us through our kidneys which definitely impacts the cells and the function there ... we know that livers are directly impacted by alcohol use because liver is filtration system. This means that, in the liver, there could be tissue scarring, jaundice, and irreversible alcoholic liver cirrhosis. It's the liver's job to breakdown 90% of the alcohol consumed so obviously the more alcohol you drink the more the liver can be compromised, even small amounts of alcohol escapes through the breath and through our lungs so as you can see this is a whole-body experience ... the previous slide simply showed the short-term effects but alcohol effects your body far longer than just the period of which that you were under the influence or intoxicated. Alcohol negatively affects all systems and organs of the human body impacting your overall health and well-being.



ALCOHOL CONSUMPTION IS RESPONSIBLE FOR

+ than **200**

diseases and injury conditions

The most common ones are:

- Mental and behavioural disorders
- Alcohol addiction
- Liver cirrhosis
- Cancers (mouth, throat, esophagus, liver, colon-rectum, breast in women)
- Cardiovascular diseases
- Injuries/death resulting from road traffic crashes, violence, and suicidal ideation (tend to occur in younger age groups)
- Fetal Alcohol Spectrum Disorder

SLIDE 13

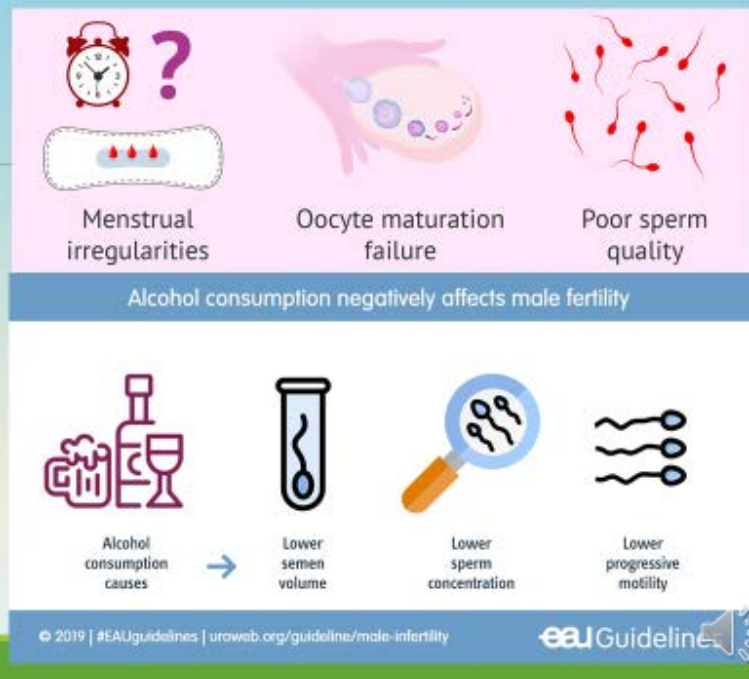
Alcohol consumption is responsible for a variety of different diseases and injuries, more than 200 in fact. Alcohol is frequently involved in incidents leading to the emergency room visits and hospitalizations.

The most common diseases and injuries associated with the use of alcohol are mental and behavioral disorders. Alcohol addiction, also known as alcohol use disorder ... Cirrhosis of the liver then a variety of cancers including mouth, throat, esophagus, liver, colon-rectum cancer. Even low to moderate levels of alcohol use can put women at an increased risk of breast cancer.

Alcohol can also lead to cardiovascular diseases, as well as vehicular accidents, (including car, motorcycles and boats), violence, and suicides which tend to occur with younger age groups.

Alcohol use during pregnancy can cause Fetal alcohol spectrum disorder in the child – a chronic disability, which we will review in details in the next Unit.

Alcohol can negatively impact the female and male reproductive systems



SLIDE 14

Alcohol can also quite negatively impact both the female and the male reproductive systems. For example, alcohol can create irregularities for our menstrual cycles and it can also lead to eggs failing to mature as they are supposed to. Alcohol can interfere with sperm production and quality and can negatively affect male fertility. Specifically, alcohol consumption causes lower seminal fluid volume as well as lower sperm concentration ... They don't move as quickly and quite simply they're not as healthy as they could be. It's important to understand that the health of a baby begins even before the point of conception. And, of course, when you will be an adult and decide to become parents one day, all of you would want babies to begin as healthy as they can be.

Alcohol negatively affects **nutrition** and **muscular strength/endurance**



Alcohol is a toxin! It has little-to-no nutritional value and it **DEPLETES** energy instead of giving the body more energy.

- Alcohol contributes to poor absorption of vitamins and minerals even when eating a healthy diet
- Causes dehydration (skin and body!)
- Can slow down your metabolism even if you are athletic
- Can prevent muscle recovery and can slow down "gains"



SLIDE 15

It's really important to understand that alcohol interferes with all kinds of things that our bodies are trying to do. For example, it negatively affects nutrition in the way that our foods are processed, and it also interferes with our muscular strength, our energy levels, and our physical and muscular endurance.

Simply put, alcohol is a toxin it has very little or no nutritional value whatsoever and instead of giving the body anything positive it depletes energy levels and interferes with the way the body is trying to process and utilize the food and nutrients that we are consuming.

Alcohol leads to poor absorption of the valuable vitamins and minerals that we are consuming even when we do work really hard to eat a healthy diet. Alcohol leads to dehydration that affects our entire body and can be seen by looking closely at our skin.

Even if we are living an otherwise healthy lifestyle which includes exercise and spending time outside and eating properly, alcohol is known to slow down our metabolism which is counterproductive on many levels.

And finally, alcohol interferes with our ability to recover and so when we're injured or when we've spent time exercising and building muscles for example alcohol can prevent muscle recovery and slow down any of the muscle gains that we've made.

Alcohol is high in calories and stimulates appetite, which can lead to overeating and weight gain



HOW MANY CALORIES ARE YOU DRINKING?

A spirit and coke has similar calories to a **blueberry muffin**



A pina colada has similar calories to a **doughnut**



A glass of wine has similar calories to a **slice of cake**



A 50ml of liqueur has similar calories to **two sausages**



A pint of lager has similar calories to a **slice of pizza**



A frozen margarita has similar calories to a **cheeseburger**



SLIDE 16

We now know that alcohol has really little to no nutritional value whatsoever however it is really high in calories. In addition to the high calories, which can lead to weight gain and other compounding issues ... it can also stimulate our appetite which again doesn't help us towards our healthy lifestyle goals. Many of us will be surprised to know that:

- a glass of spirit and Coke so for example a Rye and Coke has similar calories to a blueberry muffin.
- A pina colada has similar number of calories to a glazed donut
- a glass of wine can have as many calories as a good size sliver of cake
- and 50 milliliters of a fancy liqueur has a similar number of calories as two sausages
- a pint of beer or ale has similar calories to a slice of pizza
- in a frozen Margarita is about the same as a full-on cheeseburger

For most people, indulging in one of these foods gives them more gratification than the drink equivalent you see pictured. Additionally, people who consume alcohol often choose to consume more than one drink, which is the equivalent of multiple cheeseburgers, for example. This goes to show that the calories from alcohol can add up very quickly, yet they don't benefit our nutrition at all. You can see how consuming alcohol on a regular basis would have negative long-term effects on your nutrition, and though it is of lesser importance, it may also affect your weight as well.

Alcohol use is one of the factors that can negatively affect your skin and appearance over time



Possible effects of alcohol use over time



Before

After stopping alcohol use



Before

After stopping alcohol use



Before

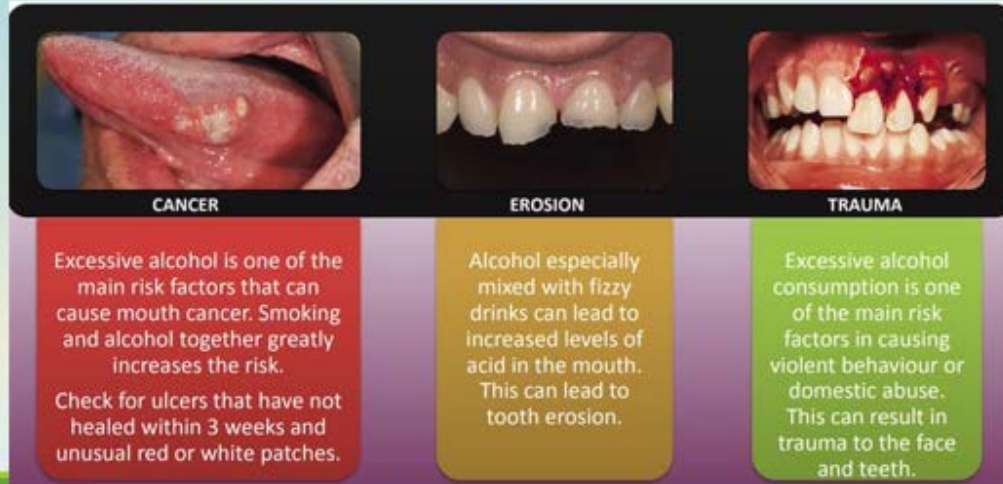
After stopping alcohol use

SLIDE 17

It was mentioned previously that alcohol can dehydrate the skin and as seen by these pictures it can also impact the appearance of our skin quite noticeably as indicated in the pictures provided in this slide. Again, we should be focused on the important ways alcohol negatively impacts our health in ways we don't see (for example, cancer risk), but we must also be aware of scientific evidence that suggests how alcohol can negatively affect our appearance as well.

Alcohol can speed up the aging process leading to more wrinkles, bags under the eyes in part due to interrupted sleep as well. Alcohol can lead to more fine lines, puffiness, and some saggy skin. It is really important to remember that alcohol is a toxin, so it does interfere with cell rejuvenation and our overall health. This slide provides some examples of what happens on the outside everybody that we're able to see and attribute to alcohol use, and it's important to remember the damage also takes place inside of her body that's less obvious, but in some cases more impactful.

Heavy alcohol use can negatively affect your mouth and smile



SLIDE 18

This slide provides us with some pretty graphic details around some of the more serious and negative impacts of heavy alcohol use. We talked about how alcohol can lead to various cancers in this slide shows us what cancer of the tongue would look like. Excessive alcohol use is one of the main risk factors that can cause mouth cancer in fact.

Naturally, combining alcohol use with smoking would increase this risk considerably – by several times! The dentist always checks our tongue for any kind of abnormalities but it's important for everyone to check for ulcers that have not healed within three weeks for example or unusual red or white patches especially if alcohol and cigarettes are a part of someone's lifestyle.

Alcohol is full of sugars and is often mixed with fizzy drinks in this combination naturally can increase our risk of tooth erosion. There is an increased amount of acid that's more frequently found in our mouths with regular alcohol use.

Excessive alcohol consumption is one of the main risk factors relating to domestic abuse and violent behavior so this often results in trauma to the face and particularly to the mouth and teeth.

The effects of alcohol may be different from person to person

Some individual factors make you even more susceptible to negative impacts, including:



- Female gender
- Low body weight
- Pre-existing physical and mental health conditions
- Use of medications (e.g., anti-depressants)
- Young age (under 25)



SLIDE 19

It's important to remember that we are all different and the effects of alcohol use and misuse will be different from person to person. Because of this, you cannot really judge what you think is “safe” for you, based on what you’ve deemed is “safe” for someone else. Firstly, alcohol impacts all bodily systems in a negative way, but certain individual factors that make people even more susceptible to these negative impacts including;

1. simply by being born a female
2. having a low body weight to begin with, especially a low BMI
3. having any kind of previous physical or mental health condition will leave person more susceptible to some of the negative impacts of alcohol use. For example, if someone struggles with anxiety and depression, his/her mental health symptoms can be much more severe the following day. You may have heard that alcohol is a ‘depressant’, which actually means it depresses the central nervous system.
4. Lastly, being under the age 25 also leads us to be more susceptible to some of the negative impacts of alcohol use, with the impact being higher the early alcohol use is initiated and the more alcohol is consumed.

Why are alcohol and substance use even more harmful for youth than for adults?

Teen brains are still “under construction” and are more heavily impacted by alcohol and substance use until after age 25.



Compared to adults, teens using substances are more likely to:

- **develop an addiction in shorter periods of time and even at lower levels of alcohol and substance use**
- **develop mental health issues due to alcohol/ substance use**

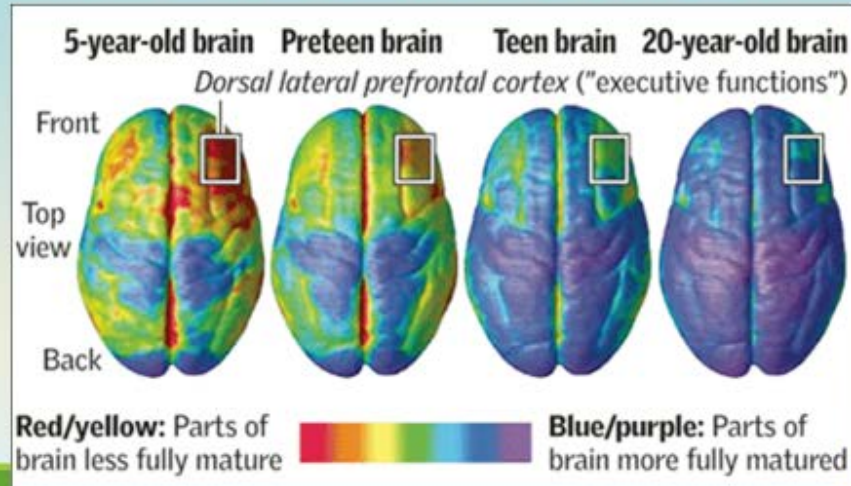


SLIDE 20

Many of you are probably wondering while the effects of alcohol would be worse on some than others and in particular why it would be worse on young people as opposed to people who are over 25..... this is because brains develop until the age of 25. Teen brains, therefore, are still growing and essentially still under construction. This means that normal brain development that is supposed to occur during this time, can be impacted by alcohol and substance use until after the age of 25.

So, for example, compared to adults, teens who use substances are more likely to develop an addiction, even with lower amounts of alcohol consumed than people who are over 25, and in a shorter period of time. People who are under 25 or also more likely to develop mental health issues due to alcohol and substance use. Alcohol interferes with the developing brain and this is really important to understand in order to prevent some of these things from happening and to make sure we're as safe and healthy as we can be.

The area of the brain responsible for judgment is not fully developed in teenagers. Using substances can damage this underdeveloped area of a teen's brain.

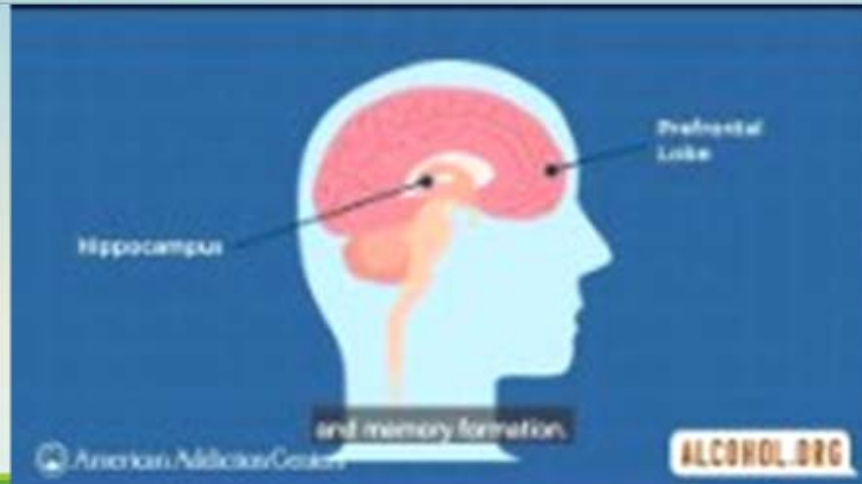


SLIDE 21

It's also very important to highlight that the section of the brain that's responsible for judgment and decision-making is not fully developed in teenagers. This is a scientific fact that can't be denied no matter how mature or well behaved and successful we are as young people. So, using substances during this time frame can also damage this underdeveloped area of the brain, and impair our judgment even further, simply because of the effects of alcohol and other drugs on the brain.

You can see from the illustrations, the prefrontal cortex of the brain that's responsible for planning, decision making and executive functions and how it's not quite developed even in the 20-year-old brain.

Video: “How does alcohol affect the teenage brain?”



SLIDE 22

Please now take a little bit of time to view the following video that describes more specifically how alcohol affects the teenage brain.

PROBLEM: We are ALL exposed to misleading information about alcohol

Unfortunately, the alcohol industry often portrays alcohol use in a positive light in the media



SLIDE 23

Unfortunately, the alcohol industry often portrays alcohol in a very positive light in the media, including glamorous images in advertising and even in memes we see on social media. Some alcohol is even marketed specifically towards women, suggested you can maintain a slim figure, for example, while having a drink. This information is very misleading. Alcohol industry simply wants people to buy more and more alcohol and this is how they make money.

PROBLEM: We are ALL exposed to misleading information about alcohol (cont'd)

There are many headlines claiming that some types of alcohol may be healthy to drink, which is **NOT TRUE**



SLIDE 24

As part of misleading information about alcohol, there are also many headlines claiming that some types of alcohol may even be healthy for us and lower the risk of certain health conditions (for example, heart problems), however this is not true.

Even if there are some understood small positive health benefits of alcohol use (and only after age 65!), scientific research clearly indicates that the negative consequences and side effects of alcohol use, far outweighs any benefits.

PROBLEM: Several popular misconceptions exist about drinking alcohol in your teens

MISCONCEPTION	FACT
✗ All of the other kids drink alcohol. You need to drink alcohol to fit in.	✓ Many teens in Ontario do not drink alcohol, especially not on a regular basis!
✗ Drinking is a good way to loosen up at parties.	✓ Drinking alcohol is actually a very hazardous way of loosening up, as it can make you say and do things you normally wouldn't do, and makes you more vulnerable in dangerous situations.
✗ Beer and wine are safer than liquor.	✓ Alcohol is alcohol. When consumed in the normal serving sizes, beer and wine are just as damaging as liquor.
✗ There's no reason to wait until you're 19 to drink alcohol.	✓ When you're young, drinking alcohol can make learning and doing new things difficult, is more likely to result in mental health issues and put you in dangerous situations.



SLIDE 25

Some of this misinformation that's widely spread about alcohol use then leads to many misconceptions around drinking alcohol, particularly during our teenage years. For example, teens may be concerned with fitting in and may feel the need to drink during social outings and events in order to fit in with the crowd and be included in activities and social circles. Many young people may actually not want to drink – think of beer, for example, you may have heard it be referred to as an acquired taste, which can start off as being unappealing but then can become more acceptable over time.

In fact, there are many teens across Ontario and other provinces, from a number of different backgrounds, who don't drink alcohol, and especially not on a regular basis. We should share this information with others to relieve some of the misguided pressures to consume alcohol that some people experience.

There's also this misconception that drinking is a good way to loosen up at parties. However, drinking alcohol can be a very consequential or even a dangerous way to loosen up at parties because you may behave in ways that are quite different to your sober self and you may do and say things that you're not proud of and maybe even quite sorry for the following days. Alcohol use can also put you in unsafe positions where you're far more vulnerable and the results can be quite dangerous for you and for others. For example, consuming alcohol might make you more vulnerable to violence, sexual abuse, walking home alone because you cannot drive, or even using poor judgment and getting into a car with someone who's been drinking or using other substances.

There is also a misconception that beer and wine, for whatever reason, are safer than liquor however it's really important for all of us to remember that alcohol is alcohol and when we consume the normal serving sizes, beer and wine are just as damaging as liquor.

There is also the misconception that there's no reason to wait until you're 19 in order to drink alcohol just because the law says so. However, it's really important to remember that when you're young, drinking alcohol can make learning and doing new things really difficult. Alcohol can impair judgment and can reduce inhibitions and possibly lead us to doing things that we're not necessarily proud of however, and more importantly, alcohol can also increase the likelihood of us developing mental health issues. Please remember! Our brains are still developing until we're 25! The law that decides legal age is 19, does not necessarily reflect this fact.

Amongst Indigenous peoples, there's also this concept that we are all related. The Anishinaabe word for that is "Nin Din Away Maa Gann Odok" which translates to "we are all related" so that when we do well everybody does well and when we don't do well, we feel that impact too. This can be applied to our youth. One of the Anishinaabe concepts for "little baby" is the word "Manitoonse" which translates to "little spirit". Anishinaabe people and other Indigenous peoples always had beautiful teachings on how to raise "little spirits" on how to be happy and healthy and to understand who they are and what their purpose is in terms of living as a human being. We now know that many harms have occurred to Indigenous peoples, and in our language, we have words that describe that concept of being harmed and not being well. One of those words would be understood as "Gi Gid Imag Isi Min" - which translates to "we are all sick" because of what happened. Again, it's referring to this idea that we're all related so that when you get hurt and sad and sick - I too feel the same thing. And conversely, when you're happy and healthy and having fun I feel the same way, and that's how we are connected as Indigenous peoples.

PROBLEM: Compared to previous years, alcohol is now more available and easier to access

Unfortunately, unlike other drugs, alcohol can be found in grocery stores, which may lead people to buy and consume more than they normally would



SLIDE 26

Another part of the problem that we are experiencing today is: compared to previous years, alcohol is just far more available and easier to access than it ever was in the past. This contributes to the overall understanding that alcohol is and 'should' be a part of everyday activities. Just 100 years ago, alcohol sales were prohibited, but things are very different today. Unfortunately, unlike other drugs, alcohol is now available in grocery stores and as a result people are consuming more than they normally would.

Consequences of misinformation and increased access to alcohol

Regardless of conflicting messages, the fact remains that alcohol use can **impair health, well-being and safety.**



SLIDE 27

Regardless of conflicting messages and increased access to alcohol, the fact remains that alcohol use can impair health, well-being and safety – even if purchased from your local grocery store. There are consequences to this misinformation and people are drinking more as a result. This is something that we always have to keep in mind because regardless of the conflicting messages the fact remains that alcohol use can impair our overall health, our sense of well-being, our social and family connections and our physical and emotional safety.

Consequences of misinformation and increased access to alcohol (cont'd)

Even if *YOU* don't personally experience or see the negative impacts of alcohol, **hospitals do.**



SLIDE 28

Even if you don't personally experience or witness the negative impacts of alcohol, we think it's really important for all of us to remember that as mentioned our hospitals do. You might be surprised to learn – once the province started selling alcohol in grocery stores in 2018, there were over 24,000 more people admitted to emergency rooms than in the two years before that. This is a significant statistic as this number of people is the same as the population of a midsize Ontario city or town.

What is the healthiest choice?

- **Avoid** alcohol and other drugs to maintain wellness
- **Work on other healthy habits** that will be long-lasting and will help you avoid alcohol later in life
- Even if you think you *might* choose to drink alcohol later in life, make sure you **delay** alcohol use for as long as possible (past your mid-20s)



SLIDE 29

So what is the healthiest choice for all of us? The healthiest choice would be to avoid the use of alcohol and any other drugs.

Healthier choices would involve working on other healthy habits that will be long lasting and that will help us to cope with life's challenges in good ways and in healthy ways and help us to avoid alcohol use later in life as well.

Even if you think you might choose to drink alcohol later on in life it would be wise to delay it and wait at least until after you've turned 25 until your brain has had the opportunity to reach its full potential and for you to be sure that there aren't any additional toxins or substances that will impair that growth and leave long lasting effects.

Benefits of staying sober

- ✓ Be healthy on the inside (brain and all systems)
- ✓ Be healthy-looking on the outside (skin and body)
- ✓ Have better memory and cognitive abilities
- ✓ Have better performance in classes and in extra-curriculars
- ✓ Have better sleep and more energy
- ✓ Have fewer mood swings and be in a better mood overall
- ✓ Be a safe driver and avoid car accidents
- ✓ Be less vulnerable to violent or unsafe situations
- ✓ Save money
- ✓ Have healthier pregnancies/children and a happier family



SLIDE 30

In summary, there are many benefits of being and staying sober – that is, choosing not to drink alcohol or use other drugs.

- Being healthy both on the inside and the out - this includes our brain and all of our internal systems as well as our skin and overall physical appearance.
- Staying sober and choosing not to drink will also help us to have a better memory and overall thinking/cognitive abilities
- Choosing not to drink will also help us to have better performance in classes and extracurricular activities
- Staying sober will help us sleep better and allow us to have more energy in order to enjoy the things that we are doing throughout the day
- Staying sober will help us keep our moods stable, and be better positioned to deal with life's stressors and challenges
- Staying sober is especially important for road safety – avoiding alcohol and other drugs will keep us safe ourselves and others on the road safe.
- Staying sober can allow us to be less vulnerable to violent and unsafe situations
- Choosing not to drink can also help us save a lot of money because alcohol is not cheap.
- Choosing not to drink can also help you have stable relationships and a happier family overall and can certainly lead to healthier pregnancies and children.

Indigenous cultures have always expressed a relationship to the Creator amongst the Ojibway in their language Anishinaabemowin. The word for God is “Gi Zhay Manido”. And “Mother Earth” can be expressed in a variety of different words - one word that comes to mind is the word for “Mother Earth” is “Mino Aki”- which really means “The Good Earth”. When you

look at this relationship, the teachings that are given to our people are expressed in our philosophies of life, and the philosophy for the life amongst the Anishinaabe people is referred to “Mino Pim At Siwin” - that is “living the good life”. And a lot of the youth today, both Indigenous and non-Indigenous youth today do want to live a healthier life, a balanced life – a life close to the Creator and close to the Earth. And by impressing amongst ourselves to be happy at to practice our seven teachings, we can strive to achieve that throughout the day. And we can speak to the elders and knowledge Keepers that would be willing to share those teachings for the Youth. The word amongst the Anishinaabe people for our youth is the word “Osh Ka Disi” - which is translated to “the new being” or “the new person”. So those of you who are young people - you're not really children any longer and you're still trying to learn how to be an adult. So “Osh Ka Disi” is the word that we have amongst our languages that speaks to our youth. Our youth are very special and need to be cared for and given special teachings, and that way they can practice the concepts of “Mino Pim At Siwin” - “living the good life”.

DRY JANUARY® Alcohol Concern

About Dry January Why do Dry January? Get involved Fundraising Blog

SIGN UP, SAVE MONEY, FEEL GREAT

DOWNLOAD THE APP: DRY JANUARY & BEYOND

79% of participants saved money

62% of participants had better sleep & more energy

49% of participants lost weight

WARNING!
Side effects may include:

- ▶ Better skin
- ▶ Losing weight
- ▶ Sleeping better
- ▶ Saving money

DRY JANUARY®
DRY.JANUARY.ORG.UK

Dry January is an annual, global movement (est. 2013) where people sign up to go alcohol-free for the whole month. 4 million people signed up in 2020 and noticed several positive effects.

SLIDE 31

The awareness of the various risks associated with alcohol use seems to be growing somewhat despite the mixed messaging and very robust marketing campaigns from the alcohol industry. In fact, as this slide indicates there's been a global movement which was established in 2013 for a 'dry January' which has continued annually and has grown in popularity over time. People sign up and participate with a number of others who also commit to go the month of January without any alcohol use. The impact is immediately noticeable.

As the slides indicate,

- 79% of the participants indicate that they saved a significant amount of money
- 62% of the participants had better sleep and demonstrated that they had more energy
- 49% of the participants actually lost weight just in the month of January alone.

As another example, in Fall 2020, there was a new buzz and campaign supported by the Canadian Cancer Agency and the First Nations Health Authority to encourage participation in 'Sober October' there definitely seems to be an awareness and an acknowledgement of the risks associated with alcohol use and a desire to live a more balanced and healthier lifestyle which is incredibly positive.

Discussion question

What are some healthier strategies or activities teens could choose instead of using alcohol or other substances?

SLIDE 32

Let's take a few minutes to think about some healthier strategies or activities that young people can participate in or choose to do instead of using alcohol or other substances? Let's be really creative here and think outside of the box and hopefully inspire each of us to continue to build some strategies that will contribute positively to our overall well-being.

Your teacher or facilitator can now press pause to read the question to the class and guide this discussion.

Balance helps us abstain from alcohol

Staying balanced mentally, physically, emotionally and spiritually, makes it easier to not use alcohol.



SLIDE 33

We will now take a moment to watch a video from Jack, who is also part of the “We Matter” campaign. You will hear Jack speak about the importance of staying balanced mentally, physically, emotionally and spiritually, and how this actually makes it EASIER to abstain from alcohol and make healthier choices.



Strategies to maintain balance and stay well

- Eat a **healthy, balanced diet** with a variety of foods and practice intuitive eating
- Access **cultural practices and teachings** as a pathway of support
- **Stay active**, exercise at least 30 minutes per day
- Join clubs or teams based on activities you enjoy
- Develop and maintain a regular **sleep** schedule
- Spend time in nature, participate in **cultural activities**
- Practise **mindfulness** and/or write in a journal
- Identify a **support network** of people you can trust (adults, friends, mentors), who you can go to if you are feeling unsafe, develop a safety plan
- **Seek support** for health concerns (physical/mental). We all need help from time to time - you don't have to struggle alone.



SLIDE 34

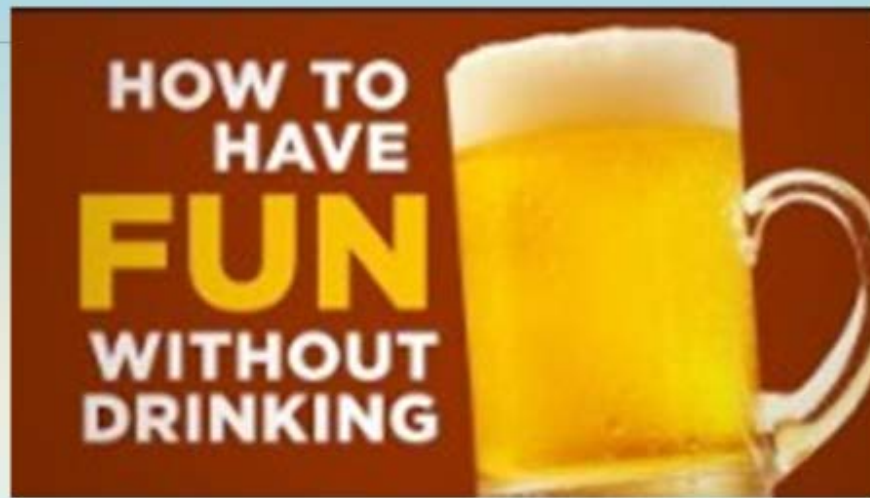
It's really important for all of us to remember that healthy choices lead us to healthy habits, which nurture healthy coping mechanisms and overall better health. This slide provides some strategies and tips that will help us reach our potential and to live our best lives.

- So, make it your plan to stay sober and if this is really important for you then seek out friends who have similar plans and values. We all appreciate being surrounded by like-minded people and in doing so helps us stay true to our goals and our overall direction in life no matter what it is.
- Do your best to eat a healthy and a balanced diet with a variety of foods and practice intuitive eating which means to enjoy the foods that you know will serve your body and mind best.
- It is important to recognize cultural practices and teachings as a pathway of support. There is so much wisdom within these traditions. For Indigenous peoples, Elders and Knowledge Keepers can help lead them down a healthy path and teach us to be well and in a good way.
- Stay active doing things that you enjoy. Exercising for 30 minutes a day is the recommendation and it's certainly far easier to achieve when we pick something that we really enjoy and maybe even can enjoy with others.
- It suggested that we consider joining clubs or team environments based on the activities that we enjoy as the team approach can help us stay committed even when we're feeling less energetic on a particular day for example. The joint effort and the sense of belonging to a 'team' and knowing that the team's ability to move forward in a good way will be impacted if you don't show up is sometimes quite a motivator for people to continue to be active and work towards their goals.

- Time spent in the outdoors is also proven to be very good for overall well-being; so, do try to spend time in nature and especially outdoor cultural activities
- Take the time to incorporate mindfulness in our day-to-day activities and routines
- Maybe make a decision to write in a Journal giving yourself an opportunity to make plans for the future and keep track of how you're feeling and where you are in terms of your hopes and your dreams and your goals and your aspirations. A Journal also provides us the opportunity to stay focused on some of the things that are going on in our lives whether they are to be celebrated or to be challenged. The Journal can be very helpful because it allows you to focus while it's 'opened' and it allows you to figuratively and literally 'close' it and put it away to move on to something else for a while so that we don't stay stuck in our overwhelming feelings of any kind.
- It's also very helpful if we can identify and choose a group of people- a support network, that you can trust and that you know will be there for you when you were feeling unwell or unsafe. We all need helpers from time to time and it's important to have a few in mind that we can access when we really need them. It's also really important to seek support for any kind of health concerns whether it's mental or physical. As mentioned, we all need helpers from time to time and you don't have to struggle alone. We wouldn't expect our broken leg to fix all by itself but sometimes we have this expectation that our emotions, our feelings and distressing thoughts and our mental health will somehow fix itself or is ours alone to struggle with. This is not true.

Many of our ceremonies are actually designed so that we can be connected with people and in our ceremonies, some of the more powerful ones that are around is referred to as the sweat lodge ceremony. Inside the sweat lodge ceremony, hot rocks are brought inside the lodge and placed in the centre of the lodge, and then the door is closed where it becomes completely dark inside the lodge. Then the person who's running the lodge, the Knowledge Keeper or the Elder, will often open it with a prayer or a song on a hand drum and provide teachings to people inside that are going there for healing. At some point afterwards, water is splashed onto the grandfather rocks that were really heated for a long time, and the water evaporates into steam and it's a cleansing ceremony. And they do this 4 times – in another words – they have 4 doorways for each of these lodges. So, when the door is open the steam escapes the door gets closed again after the break is over and they continue onto the second round. Many of these rounds are designed for specific purposes in mind. For instance, a round could be based on a healing round, so if people are feeling like they need physical healing or mental healing or spiritual healing, they will have our own dedicated for that. Other rounds are referred to as teaching rounds where young people can learn about what life is about and how to go about developing a network where they can work towards being a good person. These are some of the things that our young youth are doing today and that they're also being very open and proud to practice these ancient Traditions amongst their peoples.

How can we still have fun while staying sober?



SLIDE 35

Now we will take a few minutes to watch a video that will give us some examples and some inspiration regarding how we can enjoy our time being sober.

BUT...how can you turn down alcohol when it's offered to you?



SLIDE 36

Some people have a difficult time refusing alcohol when offered. It often presents a fairly awkward experience as we do not want to appear unappreciative, or anti-social. This short video will help us all to have easy ways to refuse a drink of alcohol available to us if and when needed in the future. Refusing alcohol should not be difficult, but it often is in today's culture, and particularly where alcohol is a large part of all social and family functions.

Video: “No alcohol allowed: Teens lead the fight against alcoholism in Saskatchewan”



SLIDE 37

We will now watch the following video about Indigenous teens in Saskatchewan who have led the fight against alcoholism in their communities

A person's decision to abstain from alcohol should be respected and not be questioned. Ultimately, a person's specific reason for not drinking is none of anyone's business.

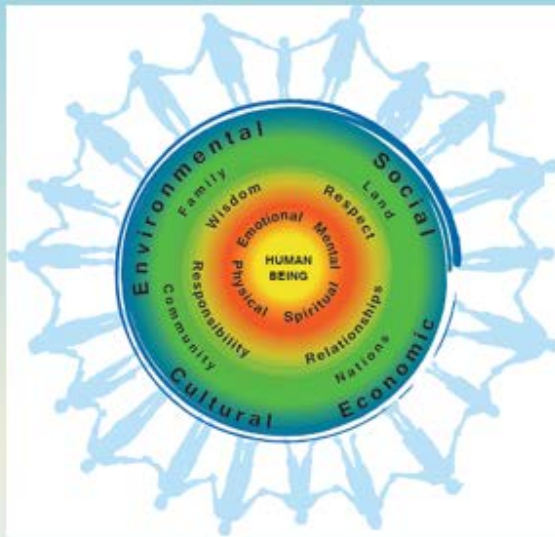
SLIDE 38

It is really important for all of us to be able to make decisions on our own without feeling pressured by our peer group or from anyone. We all should be able to make decisions that are in line with our values and that help us to live our best lives. It's not for anyone else to choose for us particularly in social settings. A person's decision not to drink should be respected and should not be questioned. Ultimately and quite frankly whether someone chooses to drink or not is nobody else's business but their own.

This slide demonstrates some examples of why people may be choosing not to drink but it is certainly up to you as to how open and forthcoming you want to be. It's not anybody's business for example if:

- you're in recovery
- or if you have a family history of alcoholism
- or if you don't like the way it makes you feel
- or if you're on a particular medication that it doesn't sit well with alcohol
- or if it's against your religion
- or if you're feeling very stressed and maybe even agitated and angry, not in a good mental state with an understanding that alcohol use would not be good for you at that time

BUT this is not anybody else's business. In adulthood, it's certainly not anyone's business to know whether or not someone is planning a pregnancy or is pregnant. The decision to say no to alcohol should be a lot easier than some people experience. By doing so more often and by being more comfortable and casual with our response, and by requesting a soda, a glass of water, or an alternative of some sort. This will only help us all be better positioned to refuse alcohol as desired. Also, refusing alcohol certainly does get easier as we get older.



Resilience

- Living according to the belief in the interrelatedness of all things
- Attending to the physical self
- Having clear thoughts
- Balancing all emotions

SLIDE 39

- Many Indigenous peoples have faced numerous barriers in achieving wholistic wellness and carry that burden daily. And while it is true that this burden continues, the good news and the important part to remember is that Indigenous peoples ARE RESILIENT also.
- Resilience is the capacity we have inside of us that allows us to persevere and overcomes life's difficulties.
- Indigenous and non-Indigenous peoples are naturally resilient, but it is also important to know that resilience is a skill that must be repeated and practiced over time.
- To do this, Indigenous peoples must live according to the belief in the interrelatedness of all things on Turtle Island. We have to make sure we attend to the physical self, have clear thoughts and balance all emotions.
- This will help us continue to make healthy choices and be in a good way.
- Lastly, Indigenous peoples should be proud, as their ancestors have fought so hard for the life they experience today!

Amongst the Anishinaabe people and the Plains Cree people the “Nehiawak” people, there's a word in the language that actually has concepts to it that could be described as being very resilient. That word pronounced is “Ahkameymo” it's almost like “to keep going”, “to keep going in spite of what's happening to you, to keep going and to be resilient”. That's what that word means. So by learning about your language, you can pick up words in a language that speak to resilience. By attending the ceremonies, it can create more avenues for our young people to become more and more resilient because that's what the ceremonies are about, is to teach these concepts about never giving up and to practice a good life.

Resilience



SLIDE 40

This is an additional video showing that Indigenous peoples will always prevail. For all of us, we must remember that it is always possible to find ourselves in doing what we love, even if we've lost ourselves before.



SUMMARY: Alcohol's impact on teen health

- Alcohol impacts **ALL bodily systems negatively** – inside and outside.
- Alcohol is a **carcinogen** and a **toxin**, and is unhealthy in any amount, in any form, at any age.
- Alcohol is **ESPECIALLY dangerous for youth** – the brain is still developing until the mid-20s
- You don't need alcohol to have fun! There are many benefits to staying sober, for yourself and for others.



SLIDE 41

In summary, some of the key messages that we've touched on so far include first and foremost that alcohol does have a negative impact on health, especially teen health.

Alcohol impacts all bodily systems in a harmful way ... this includes our internal body systems and our external body systems that are more visible to ourselves and others. As it was mentioned alcohol is a toxin and we need to be clear that alcohol is also a carcinogen which is unhealthy in any amount, in any form, and at any age.

Alcohol use is especially dangerous for young people because the brain is still under construction until at least age 25. That means alcohol can interfere with the way your brain is supposed to develop and that can decrease its potential to work the way it is intended. For example; alcohol can impact memory, cognition, reasoning skills, decision making and increase impulsivity.

Also, we all want everyone to remember that we don't need alcohol in order to have a good time or to have some fun..... there are many benefits to staying sober for yourself and for others. We discussed that we all need helpers from time to time and sometimes when we're at social events where other people find themselves in trouble, when we're sober and when we're clear minded we can be helpful to make sure that good decisions are made and people remain safe.

Remember that alcohol is referred to as Ishkode Waabo - Firewater and that our people always knew that has potential to harm people including unborn children and we all know that Creator Gi Zhay Manido gave our people sacred laws Gagage Inakonigaywin means eternal law Katay Inakonigaywin means ancient law and that's where we receive our teachings on how to live a good life Mino Bimatiziwin and to have healthy wellbeing Mino Ayawin.

If you or someone you know is struggling with alcohol, substance use or mental health:

Call ConnexOntario: 1-866-531-2600 or Ontario Drug and Alcohol Helpline 1-866-622-4636. They may help connect you to:

- Community mental health programs
- Crisis services and Distress Centres
- Support groups, family/health services
- Housing help centres
- Youth or senior programs
- Caregivers supports
- Food banks and meal programs



NAN HOPE

NAN Hope is a Telephone & Virtual Rapid Access Centre that offers 3 services:

- 24/7 toll-free rapid access to confidential crisis services
- Navigation: Our Navigators provide connection to ongoing mental health and addictions support services in home communities and existing regional supports
- Rapid Access to clinical and mental health counselling

1-844-NAN-HOPE (626-4673)



SLIDE 42

There is help available in Ontario specifically if we or anyone that we know of is struggling with alcohol or substance use and mental health issues.

The slide provides the number for kids help phone or ConnexOntario. Both of these support agencies may be able to connect you directly to;

- Local community mental health programs
- Crisis services in distress centres
- Local and accessible support groups for individuals and family members and additional health services
- These agencies can also connect individuals to housing help centres if we or people that we know are at risk of losing their stable housing
- Connections can be made to youth or senior programs to offer support that would be different of course but yet very helpful in addressing alcohol use and misuse
- There's also community supports available for caregivers of individuals who are experiencing difficulties with alcohol or substance use and these agencies can also connect to local food banks and meal programs that can help with food insecurity.



UNIT 2

Impacts of alcohol use in pregnancy and Fetal Alcohol Spectrum Disorder (FASD)



SLIDE 43 – BEGINNING OF UNIT 2

This next unit is going to focus on the impact that alcohol has on the mother and child during pregnancy and being exposed to alcohol in the womb puts the baby at risk, and often results in Fetal Alcohol Spectrum Disorder, or “FASD”.

Sacredness of mother and child


- Mothering is an important pathway to:
 - restoring cultural traditions and
 - revitalizing family ties that have been affected by residential schools, the 60s Scoop and other child welfare policies and practices.
- Mothering can be a source of strength in resisting racism and social inequities; asserting identity and self-determination for themselves and their families.
- For many women and men, parenthood is an opportunity to make healthy changes and to reconnect with cultural practices related to pregnancy, childbirth, and childrearing



SLIDE 44

First and foremost, we have to understand that motherhood is a strength to Indigenous communities, and the connection between a mother and her child is the most sacred. Some Indigenous peoples have gone through so many difficult experiences, and mothering is an especially important pathway to restoring some of the cultural traditions that may have been lost. In the new generations, mothering helps revitalize family ties if they were previously broken, and can strengthen family connections that may have been previously disrupted. Mothering is a way to pass valuable, powerful cultural teachings through language and tradition.

Mothering can be a complex experience of course, but it is not a weakness – it is a **STRENGTH**. Women can teach their children to live in a good way, maintain balance and to stay resilient. This goes a long way in helping future generations resist the barriers that may be faced, including racism, discrimination and social inequities. Mothering helps us assert cultural identities and work towards self-determination. Of course, this is not simply up to the mothers. For mothers AND their partners, parenthood is an opportunity to make healthy changes and to reconnect with cultural practices that will allow them to do so. Parenthood is a time when women and their partners may experience isolation, so it is important to maintain contact with cultural traditions, especially practices related to pregnancy, childbirth and child rearing. For example, in Indigenous communities, Indigenous midwives aim to reconnect community members to the sacred experience of new births in the community. Indigenous people have always believed women were sacred because they were given the gift to bear children and that we believe we have to be part of that raising of the child – we call that “Abinojii Ombig Igos Owin” – how to give the child the teachings to be a strong individual and to be healthy and happy and to know their identity.



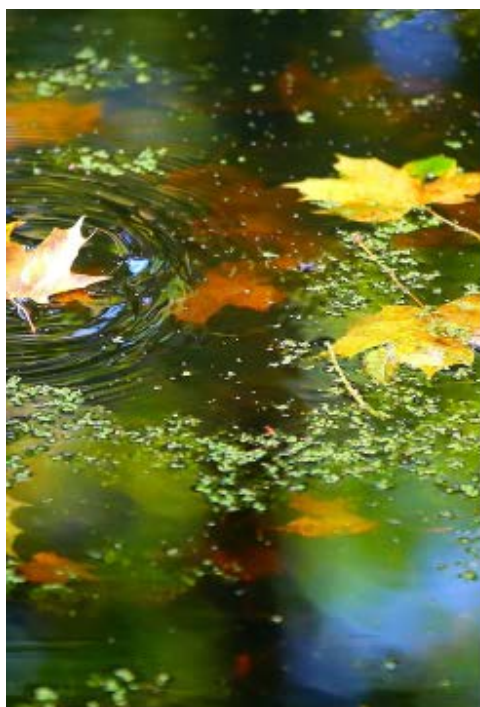
Discussion question

Can you think of what may influence some women to drink alcohol while they are pregnant?



SLIDE 45

We will start this unit with a discussion question about influences of alcohol use, this time specifically about pregnancy. Your teacher can now press pause to read the question to the class and guide this discussion.



Factors influencing alcohol use in pregnancy

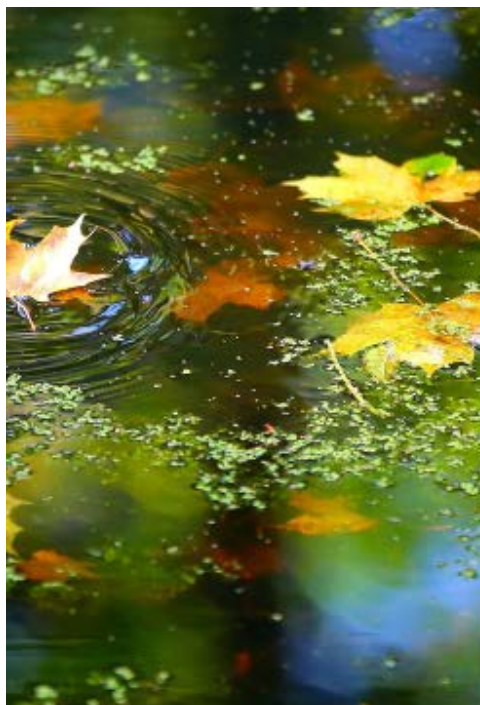
- Women might not know they are pregnant (unplanned pregnancy)
- Alcohol is often part of celebrations or socialization, and women may feel pressured to drink, especially if they haven't yet "announced" their pregnancy
- Women may have heard it is okay to drink alcohol in pregnancy, from friends, family members or even in the media
- Alcohol is consumed as an unhealthy coping strategy to deal with difficult life experiences
- Women may have an alcohol or drug addiction before and during pregnancy



SLIDE 46

There are many factors influencing alcohol use that takes place during pregnancies. None of the factors at play, however, include the woman's deliberate attempt to harm the growing baby. That is not the case at all – pregnant women do not wish to harm their babies. The circumstances are complex and convoluted, and it's not necessarily about just the woman's choices and actions. For example; they may not be aware of the pregnancy at all - this occurs quite frequently because over 50% of pregnancies are unplanned and about 80% of women in childbearing years are known to consume alcohol. It doesn't take long to understand that many pregnancies are exposed to alcohol. Alcohol is a part of many celebrations and many opportunities that we take to socialize. And oftentimes unfortunately, women are made to feel pressured to drink especially if they haven't made the pregnancy public or officially announced the pregnancy yet. Women may have heard that it's OK to drink alcohol during the pregnancy as we know that message is spoken often from friends, from medical providers, from social service workers, from family members, from television shows, from songs that we hear on radio and from other various forms of media. The evidence to date clearly indicates that even small amounts of alcohol could be harmful for the unborn baby. The wrong kind of messaging leads to significant confusion and negative impacts for the baby and family.

Alcohol for many is also consumed as an unhealthy coping strategy to deal with difficult life experiences. And especially if women have gotten used to drinking in order to cope, this may especially be the case during the time they are pregnant. Women may also struggle with a significant alcohol or drug addiction before and or during the pregnancy. The addiction makes quitting extremely difficult for many in particular for those without direct support. Many women who struggled with alcohol addiction during their pregnancy wish that they could have had the support they needed in order to ensure alcohol free pregnancies.



Partner/relationship influences on alcohol use in pregnancy

Alcohol in pregnancy is not just about the woman's individual choices! Men/partners have a huge influence on:

- Relationship/family dynamics and communication patterns
- Stress levels and coping mechanisms
- Pregnancy planning
- Alcohol and substance use patterns



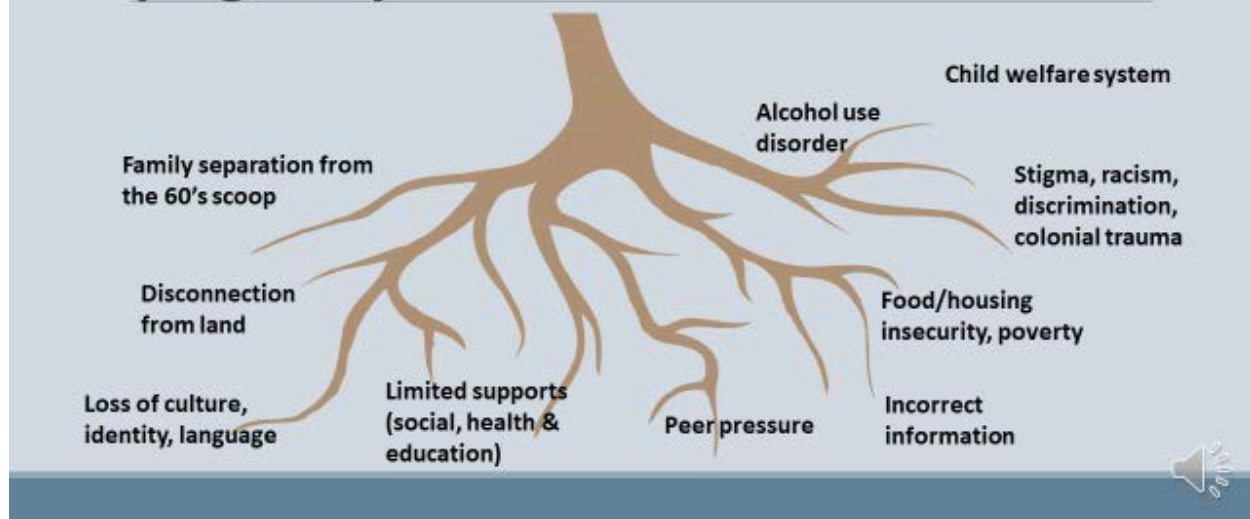
SLIDE 47

Our living arrangements and who we spend most of our time with also has a significant impact on our alcohol and drug consumption in general, including whether or not we will continue to use alcohol during our pregnancies. Partners have a direct role to play ... with a huge influence on the dynamics of the relationship itself meaning “is the relationship healthy?” “Is there domestic violence within?”. “Is alcohol use a coping strategy for both partners?”

Relationships and family dynamics as well as communication patterns can significantly influence alcohol use.

In the Anishinaabe dialect, which is very common to hear in our province of Ontario, these words are very powerful to understand relationships. How we have words for partners such as “Wii Jii Waa Gan”, which is one way to say “this person is my spouse”. “Wii Di Ge Maa Gan” is another way to express that concept of relationships. The old Elders would often remind people to take care of each other – “Baa Mi I Dig” - would be one way to say that word “Baa Mi I Dig” - “take care”- “of each other”. Another way to understand concepts of relationships that men may have with their partners and vice-versa could be saying “Mino Baa Mi I Dig” means “in a good way”, so “take care of each other in a good way”. “Naa Gaji I Dig” is another way to express this idea of communication being healthy. “Naa Gaji I Dig” would mean “look after each other”.

The roots of alcohol use during pregnancy



SLIDE 48

There are also many other factors that come to play when it comes to alcohol use during pregnancy that clearly make it so that alcohol use is not simply a 'choice'. These are more societal factors that are really the "roots" of alcohol use during pregnancy among Indigenous peoples. You will see that many of the factors related to alcohol use in general also relate to alcohol use during pregnancy. For example:

- Family separation of Indigenous peoples, including during the Sixties' Scoop and even today in the child welfare system
- Disconnection from the land and with that, loss of culture, identity and language
- Indigenous peoples especially, face barriers to getting the appropriate supports – including limited access to social support, health care and education. Limited access to health care could mean that the nearest doctor's office is too far away or the available prenatal care is slightly discriminatory to Indigenous cultural practices. Limited access to education may mean that you simply don't get a chance to receive the correct information about the harmful effects of alcohol during pregnancy. These things contribute to a general lack of information and maybe even peer pressure to consume alcohol during pregnancy.
- Similarly, Indigenous people disproportionately face obstacles such as stigma, racism, discrimination, colonial trauma, as well food and housing insecurity and poverty
- Again, it is important to understand that most Indigenous people do NOT drink alcohol. However, for some portion of Indigenous peoples who do drink alcohol and who are more likely to have an alcohol addiction, this can be an issue during pregnancy. For women who are pregnant and already facing limited access to education and health care, not having access to the right supports when dealing with an alcohol addiction

means unfortunately that the baby is likely to be exposed to alcohol in the womb. This can result in damage to the baby's bodily systems and may even result in FASD.

In our language, Anishinaabemowin, the Ojibwe language which is very common in our province of Ontario, there are words that speak to a person that's pregnant or expecting a baby. "Gi Gish Ka Waa Waso" is one of these words. "Gi Gish Ka Waa Waso" so it's almost you can hear that word "Waaw" which is our word for egg in that word. It's a very sacred statement because it means that person is full of a living spirit and that spirit will soon come and be born to that woman. There's another one that's specifically talks about that "person will be having a baby" – "Wii Onii Jaan Isi" - is one way to talk about. It speaks specifically to "that women will be delivering that baby". And if you think about it when the baby comes into this world and that Nation that baby is from has suffered things like the Sixties Scoop, alcohol use disorder, the child welfare system and racism and stigma and housing and poverty - these sort of things that's all on this slide, disconnection from the land it's almost that language we have words that speak to that in one of those words is "Gi Gid Imag Isi Min"- this translates to "we are all in a state of distress". So, it's like our people knew that when alcohol was coming and being introduced to our people, we knew that this could have the potential to cause a lot of damage and that's how we express these kinds of words.

How does alcohol affect the baby in the womb?



SLIDE 49

Now we'll take a little bit of time to view this video that helps to describe the dangers of drinking alcohol during pregnancy and how the alcohol impacts the baby in the womb.

Warning:
Drinking alcohol during pregnancy can cause birth defects and brain damage to your baby.

Pregnant?
No Alcohol is Safest.

Experts agree: There is no safe amount or type of alcohol to drink, at any time during pregnancy.

PREGNANT?

1-877-EAS-INFO • www.alcoholfreepregnancy.ca Ontario CANADA.CA/HEALTH Canada

SLIDE 50

It's really important for all of us to understand and share the message that the experts all agree on. This message is “there is no safe amount ... no safe type ... and no safe time to consume alcohol during pregnancy”. People should be warned and made aware of the risks associated with alcohol use during pregnancy, as this can have many harmful health impacts on the child.

Alcohol travels directly to the baby via the umbilical cord in the womb.

Alcohol can affect the fetus even when it is the size of this 'zero' in the coin. When it is this size, the fetal brain, heart, eyes, and face have already started to develop.

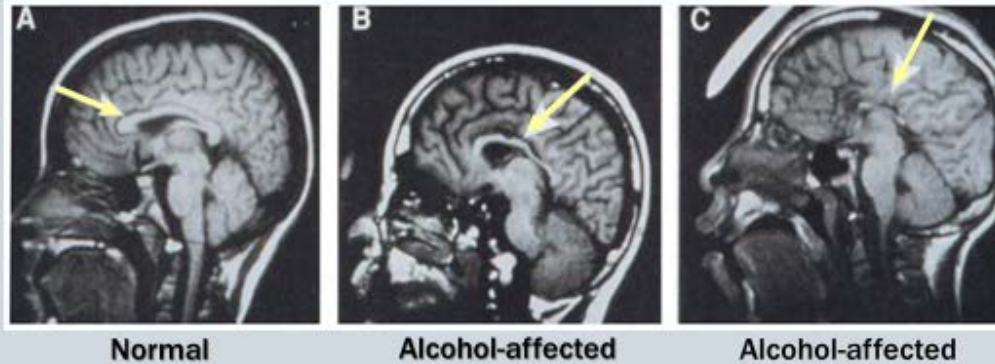


SLIDE 51

After a pregnant woman ingests any kind of alcoholic drink, the alcohol swiftly passes through the umbilical cord, reaching the fetus. There, it affects all developing parts of the baby, including the brain, central nervous system (CNS), heart, eyes, ears, legs, arms, teeth, external genitalia, and palate of the fetus. Babies do not have the ability to break down alcohol in the same way that adult women do, so their blood alcohol level, initially the same as the mother's, stays increased for longer. You will recall that alcohol is especially dangerous for children and youth because their brains and bodies are still developing. If you think about how harmful alcohol can be for the health of teenagers and adults, this impact is astronomically higher for babies still in the womb. Alcohol can have damaging effects to the foetus, including in early pregnancy, before most women even know they're pregnant. Alcohol can affect the baby's brain when it is the size of this 'zero' in the nickel you see.

When the embryo is the size of that zero in the coin it is approximately 17 days old (or 2-3 days after conception), and at that point, it already has the cells that will form the brain, heart, eyes and the face. Therefore, alcohol can damage these cells and impair development.

Exposure to alcohol in the womb can cause permanent brain damage, affecting important structures such as the cerebellum and corpus callosum



There is a permanent loss of the corpus callosum tissue

Source: Mattson et al. 1994. Alcohol Health & Research World

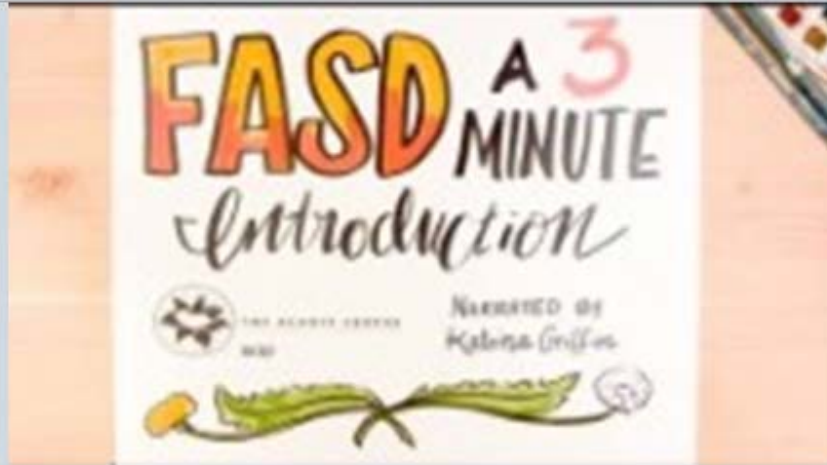
SLIDE 52

The pictures on this slide show clearly that alcohol can permanently damage the fetal brain. Several parts of the brain are discussed here. You can think of the corpus callosum as being the “conductor” of the brain, responsible for carrying messages across. The cerebellum is responsible for coordinating the body’s movement and balance – you can think of it as a “yoga/fitness instructor”. If there is damage to the corpus callosum or cerebellum, this can result in difficulties with movement and body coordination, speech delays or difficulties, mental disorders and/or challenges with social interaction.

On this slide, we see two images: the brain of a normally developing individual (image A) – the arrow points to a properly developed corpus callosum – and two individuals with Fetal Alcohol Syndrome (the most severe type of Fetal Alcohol Spectrum Disorder) (images B and C) – the arrow points to a permanent loss of the tissue of the corpus callosum. On image C the tissue of the corpus callosum is almost invisible.

In most cases, however, the effects of exposure to alcohol in the womb are most often undetectable on an MRI or brain scan. Any exposure to alcohol in the womb means negative impact, lost potential and any deficits as a result of this will last a lifetime.

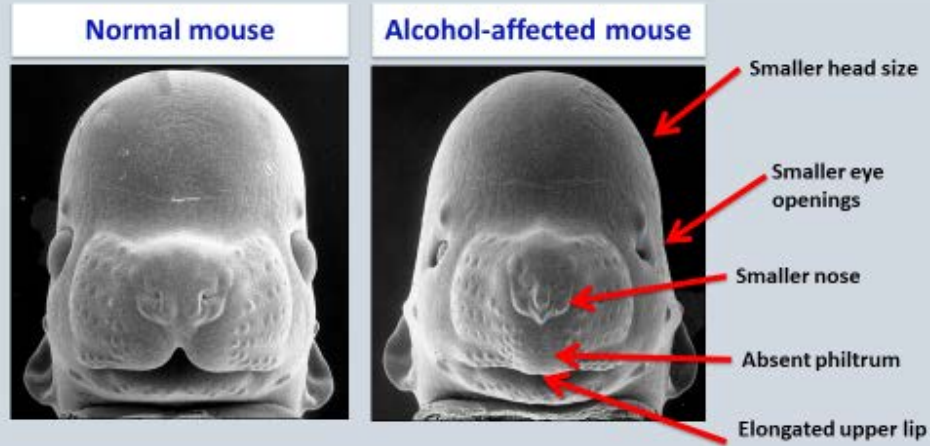
What is Fetal Alcohol Spectrum Disorder (FASD)?



SLIDE 53

Now let's take a few minutes to look at a video that helps to introduce us all to what FASD really is.

Studies show that animals who were exposed to alcohol in the womb have visibly different facial features, which might be present in humans as well



SLIDE 54

Now, let's take a close look at these two photographs of little mice that are still growing in their womb. On the left you see a normal mouse who has not been exposed to alcohol in the womb. On the right is a mouse who has been exposed. Clearly you can see that the face of the mouse on the right has been impacted when you compare the two. Like humans, alcohol affected mice have smaller head sizes, their eyes and their openings are quite a bit smaller their nose is smaller. They don't have the grooves just above the upper lip and the upper lip itself is longer than normal.

FASD is largely a **hidden** disability

- Only a **small proportion** (10%) of individuals with FASD have certain facial features, which **can ONLY be measured and identified by a trained doctor** with specialized tools/software. Some of these features are:
 - Smooth or flattened philtrum (groove between the nose and upper lip)
 - Short palpebral fissures (the area between the open eyelids)
 - Thin upper lip
- Even if these features are present, they fade over time (with age).
- For the most part, **you CANNOT tell who has been exposed to alcohol in the womb just by looking at them.**



SLIDE 55

FASD is largely a hidden disability and it's also one of the most misdiagnosed and misunderstood disabilities out there. Part of the reason for the misunderstanding is that only a very small portion; less than 10% in fact, of individuals with FASD have those certain identifiable facial features.

These certain facial features can be measured and identified by a trained clinician with specialized tools and software. Some of these features are:

- a. the groove between the nose and the upper lip, called the 'philtrum' is smoother than it would have been
- b. The distance between internal and external corners of the eye is shorter, which is called 'short palpebral fissures'
- c. and a thin upper lip

It's important to understand and acknowledge that even if these features are present, they will fade overtime and with age making them less identifiable and recognizable. For the most part it is really difficult to tell who's been exposed to alcohol in the womb just by looking at them, making this disability truly hidden on a societal level.

FASD: How common is it?

- Approximately **4% (1.5 million people)** in the general population of Canada have FASD.
- FASD is **more common than Autism Spectrum Disorder or Down's Syndrome combined**
- FASD is the leading known cause of developmental delay in Canada.
- In some sub-groups of people in Canada (e.g., children in foster care or individuals who are incarcerated), the number of people with FASD is **at least 10 times higher**.



SLIDE 56

Fetal Alcohol Spectrum Disorder or FASD ... just how common is it? How often do we see people affected by prenatal alcohol exposure? Where do you think you'll be most likely to see people who do have FASD?

Please take a moment and think about this next fact ... approximately 4% which means 1.5 million people of the general population in Canada would qualify for an FASD diagnosis. FASD is more common than autism spectrum disorder and Down syndrome combined.

FASD is the leading known cause of developmental delay in Canada and in some subgroups, for example; children in foster care or individuals who are involved in the justice system, maybe in jail, the number of people with FASD is at least 10 times higher. This means that people with a developmental disability are being incarcerated at a much higher rate than people without FASD but yet they're still being treated and rehabilitated in the same way. Unfortunately, this doesn't always work the way we intend, and some individuals may be at a lifetime disadvantage because of this.

Any organ or system of the body can be negatively affected by alcohol during pregnancy (not just the brain)

People with FASD may experience multiple physical health problems including, but not limited to:

- Organ defects
- Kidney diseases
- Visual and hearing impairments (i.e., blindness; deafness)
- Teeth malformations and speech problems
- Heart diseases
- Nervous system diseases
- Musculoskeletal conditions (bone growth issues, problems with joints)
- Poor growth (shorter-than-average height)



SLIDE 57

Fetal alcohol spectrum disorder is a “whole body” body experience for those affected. Any organ or system of the body can be negatively impacted by alcohol during the pregnancy. Prenatal exposure to alcohol does not just affect the brain ... Yet the brain in its capacity fully affects other systems within the body – including, our coordination, our balance the way we process sounds, touch, sight etc. People with FASD experience multiple physical health problems including but not limited to;

- organ defects
- kidney diseases
- visual and hearing impairments for example blindness, deafness
- sometimes we find that there are teeth malformations that result in speech problems but there are speech problems that are not necessarily related to teeth malformations as well
- there is also a link to heart disease
- Nervous system diseases
- And there are also a number of bone growth issues, problems with joints early onset of arthritis for example.
- and although this isn't absolute, there is often an Association with poor growth ... many people who have experienced significant prenatal alcohol exposure have growth issues and are often shorter than average in height. It is important to note however that the revisions to the Canadian guidelines for diagnosis have actually taken growth out of the criteria because there are so many people who do struggle with the effects of prenatal alcohol exposure and qualify for FASD but do not meet the growth criteria, in fact they grow quite normally and even excessively at times.

Due to the permanent damage to the central nervous system (brain), individuals with FASD may experience:

- Poor memory, attention, academic difficulties or school dropout
- Poor reasoning and judgment skills
- Speech and language difficulties
- Mental health issues and addictions
- Difficulties getting or maintaining employment
- Involvement in the criminal justice system (as victim or offender)
- Learning disabilities
- Behavioural problems, impulsivity, poor social skills
- Hyperactive behaviour and trouble completing tasks
- Inability to live independently
- Involvement in the criminal justice system (as victim or offender)
- Homelessness



SLIDE 58

In addition to some of the physical complications, individuals with FASD may also experience:

- Inconsistent memories, difficulties with concentration and attention which often contribute to poor academic performance and often will lead to dropping out of school entirely
- prenatal alcohol exposure is directly linked to poor reasoning skills and poor judgment. This leaves individuals vulnerable to being taken advantage of and to be led into circumstances that are not necessarily in line with their values.
- there are often speech and language difficulties, it is very common for people who are experiencing the effects of prenatal alcohol exposure to be very good communicators in terms of expressive language ... But struggle sometimes quite significantly with their ability to receive language and to interpret it correctly and to be able to retain and recall what's been said to them (i.e., Directions, rules, functions, plans etc.)
- it is very common for people who have FASD to struggle with additional mental health issues and be more susceptible to addictions
- oftentimes individuals with FASD also experience difficulties finding employment but most often they would experience difficulties maintaining employment due to ongoing challenges associated with meeting deadlines, memory, responsibility adjustments, difficulty with transferring skills to similar but different circumstances, changes to schedules, being physically well enough and prepared for each day etc.
- We've mentioned already that many people with FASD have trouble with the law at some point in their lives. There is an increased vulnerability among individuals with FASD because of their neurological impairments and impulsivity. They are prone to

people-pleasing, which can mean that they can be led into gang-like atmospheres, and also be victimized by people with criminal intent

- people with FASD often experience learning disabilities that can be quite specific. So, their learning profiles can be quite varied with some significant deficits but some additional significant strengths so for example it would not be uncommon for somebody to really struggle with mathematical computations but yet be a very accomplished novelist, poet or singer songwriter.
- Behavioral problems, impulsivity, not learning from one's mistakes and ongoing difficulties within social circumstances are common difficulties associated with fetal alcohol spectrum disorder
- people with FASD also struggle with hyperactivity which means that settling down and completing tasks can be very difficult
- the research so far indicates that most people with FASD struggle quite significantly with independent living - paying bills on time, money management, keeping up with daily living activities and housekeeping for example.
- and many of the people currently utilizing our housing support initiatives currently struggle with fetal alcohol spectrum disorder – often undiagnosed with FASD but with many other mental health diagnoses.

FASD looks different from person to person



SLIDE 59

Although there are some commonalities associated with FASD which allows for consistent and accurate diagnosis. It's important to remember that the impact of alcohol on the growing baby varies from person to person in large part due to the natural variances re: when the alcohol was consumed, how often the alcohol was consumed, and what other kinds of risk factors and or protective factors have been associated with the individual and family overall, including genetics and environment. When there is no alcohol consumed and within the mother's system, then the baby will develop healthy and will 100% not have FASD.

Let's take a few moments to watch this video that helps us to understand what it's like to be living with fetal alcohol spectrum disorder.

FASD looks different from person to person



SLIDE 60

Now we invite you to take another few minutes to view the following video where Morgan Fawcett tells his own story about his experiences living with FASD. Morgan Fawcett also helps to explain that FASD looks very different from person to person and may benefit from two comprehensive assessment in order to help identify the individual strengths and areas of challenge that need to be properly supported.

The lifelong impacts of living with FASD

- Due to the numerous health conditions and specific life experiences of individuals with FASD, the economic impact of FASD is high
- The lifetime care for an individual with FASD may cost up to **\$1.5 million CAD**
- **FASD is lifelong – there is no “cure”**, but there are interventions and supports to help individuals with FASD work towards living healthy, fulfilling lives

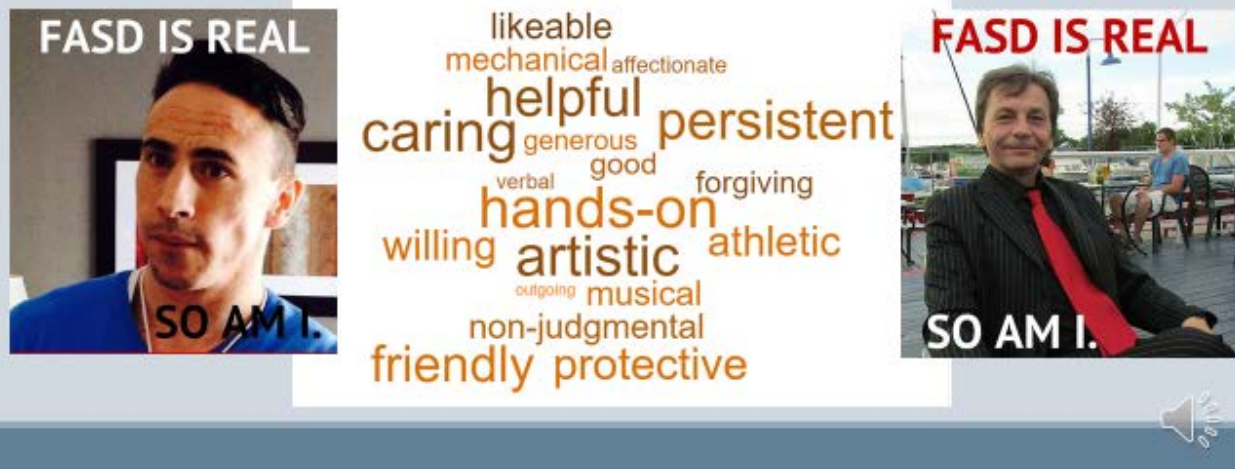


SLIDE 61

The impacts of FASD are lifelong – they occur not only on the individual level but also on a societal level. For example, there is a significant economic impact associated with fetal alcohol spectrum disorder. This includes cost of health care, special education, residential care, criminal justice system, productivity losses due to morbidity and premature mortality, and productivity losses of caregivers of children with FASD. The lifetime care for an individual with FASD may cost up to 1.5 million Canadian dollars.

Although this is often difficult to accept and to thoroughly understand, it is important to remember that FASD is a lifelong disability - there is no ‘cure’, but there are interventions and supports to help individuals with FASD work towards living healthy fulfilling lives and to be better positioned to reach their potential.

While they do face significant life challenges, individuals with FASD **also** have many different individual **strengths and talents** that should be found and supported



SLIDE 62

There is no question or debate that people with FASD face significant life challenges. However, it is equally important to understand and acknowledge that people with FASD also have many different individual strengths and talents that should be identified, celebrated and supported.

People with FASD are often described as being likable because they are warm, they are caring, and they are incredibly accepting and tolerant. People with FASD often start each day as a new one ... willing to let go of the past and begin fresh with a positive attitude full of hope. People with FASD can be incredibly talented, gifted in fact with creativity, artistic ability, mechanical understanding, tenacity, athletic ability, musical talents etc. People with FASD can also be generous, caring, persistent, forgiving, non-judgmental, friendly, and protective of their loved ones.

Strengths of people with FASD and their communities



SLIDE 63

Let's take a moment to watch this video of Myles Himmelreich explain his experiences of having FASD. He is well-known as an advocate for FASD support services and though he faces many challenges in his life, the supports available to him have allowed him to be the best, most empowered and successful version of himself.

Strengths of people with FASD who have appropriate supports

Myles Himmelreich has had a lot of success in life, including co-authored books! He explained:

“That makes me, me? Not FASD. What makes me, me, is the athlete that I am, the big brother, the friend, the co-author, the motivational speaker, the consultant. Those are what my successes are and those are what I focus on when I’m struggling. I try to keep my vision and my focus on my successes, because that is who I am, someone with FASD who is successful.”



SLIDE 64

As Myles says in his video, he has had a lot of success in his life despite living with FASD. He has even co-authored books! He makes it clear that while FASD is a part of him, he is MORE than just his diagnosis. This condition does not define who he is as a person. We will now pause for a moment for everyone to read this powerful quote from Myles.

How can we prevent the negative impacts of alcohol use during pregnancy such as FASD?

- The safest, healthiest choice is to NOT drink at ALL (any amount or type) at any time while:
 - At risk of becoming pregnant
 - Planning for a baby
 - Pregnant
- Abstaining from alcohol completely during all of these times will ensure there is no FASD in the child and minimize the risk of learning disabilities and other mental health issues, as a result of permanent changes to the brain from alcohol.
- Even if a woman has already accidentally consumed alcohol while pregnant, it is important for her to stop drinking alcohol as soon as possible. Pregnant women must refer to family, community and medical supports if they have difficulties abstaining from alcohol.



SLIDE 65

Being that FASD is the leading cause of developmental delays in the Western world, there is clearly a benefit to ongoing prevention conversations and initiatives. However, in spite of our efforts thus far, alcohol use during pregnancy seems to be on the rise. It's important for us to have ongoing conversations and also to explore how we can be doing things a little bit differently. It's important to ask how we can prevent the negative impacts of alcohol use during pregnancy such as fetal alcohol spectrum disorder.

- To begin it's important to remember that the safest and healthiest choice is to not drink at all at any time when there may be pregnancy. So, this means if we're sexually active and not using protection, there's a chance that we could become pregnant. If we are planning for a baby, then it's very important for all of us to understand that the safest choice is to abstain completely. If we know that we are pregnant then again, the safest choice is to abstain from alcohol use and to surround yourself with people who will help support that decision.
- Ensuring that there is no alcohol consumption during pregnancy will completely protect the baby from the impact of prenatal alcohol exposure and will ensure that FASD will not be possible
- abstinence from alcohol will also minimize the risk of learning disabilities and other mental health issues. If we know that there's been no alcohol then we can be assured that it will not contribute to any potential mental health or learning difficulties or permanent changes to the brain as a result of alcohol exposure.

An **alcohol-free** and **drug-free** pregnancy is the safest choice for the mother and baby

It is important to also avoid tobacco, cannabis, opioids and illicit drugs while pregnant. They have their own negative effects and can even increase the risk of FASD (if used with alcohol).



SLIDE 66

As we've discussed, an alcohol and drug free pregnancy is the safest choice for both mother and baby. Again, it's important for all of us to do what we can to ensure that pregnancies are as healthy as they can be and that includes also abstaining from tobacco cannabis opioids and other illicit drugs while pregnant. They have their own negative effects and can even increase the risk of FASD if alcohol is also consumed with the substances listed above.

Alcohol should also be avoided while breastfeeding

- After birth, infants might be exposed to alcohol through breastmilk if the mother has consumed alcohol during that time
- Babies cannot metabolize alcohol in the womb or after birth in the same way adults can, and it stays in their system for far longer and can be very harmful



SLIDE 67

As we discussed earlier in Unit 1, the brain continues to be under construction until age 25 and it is recommended that alcohol use not take place before this time. It stands for reason then that drinking alcohol while breastfeeding should also be avoided, as alcohol can be very harmful to infants.

- The alcohol consumed by moms after giving birth will go directly to the baby through breast milk and this alcohol can impact development systemically. The alcohol level in breast milk is essentially the same as the alcohol level in a mother's bloodstream, and remain in the breastmilk for hours after drinking, depending on how much was consumed.
- Babies cannot metabolize alcohol in the same way the battles can and as a result the alcohol stays within their system far longer and continued to damage systems for a longer period of time which is certainly not what we're aiming to do

Infants exposed to alcohol through breastmilk can have health problems, including:

- Delayed or interrupted cognitive development
- Interrupted motor function development
- Disrupted sleep patterns
- Excessive crying
- Increased agitation or irritability
- Delayed growth
- Difficulty latching/feeding



Therefore, abstaining from alcohol is the safest, healthiest choice while breastfeeding



SLIDE 68

Research has clearly indicated that infants who have been exposed to alcohol through breast milk can also have significant health problems including but not limited to:

- a. delayed or interrupted cognitive/thinking development
- b. interrupted motor function which means that their movement and coordination skills can be somewhat delayed and/or impaired
- c. disrupted sleep patterns which doesn't help anyone adjust to the new baby experience - things are tougher for all in the family if people are lacking sleep.
- d. alcohol exposure through breast milk can also lead to a fussy baby with excessive crying which again doesn't help with the adjustment for either parent or child
- e. infants exposed to alcohol through breast milk can also experience increased agitation or irritability
- f. there could be delayed growth associated with alcohol exposure through breast milk
- g. and finally, there has been a link to a difficult latch and challenging feeding experiences for babies who've been exposed to alcohol through breast milk

The final message here would be similar to what we've been discussing throughout this curriculum, and that would be; the safest, healthiest, choice while breastfeeding would be to avoid alcohol use altogether.

Video: “Drinking while breastfeeding could hurt a child's brain development”



SLIDE 69

Now let's take a few minutes to watch a video that helps to explain the risks associated with drinking alcohol while breastfeeding and what it can do to a child's brain in its development.



SUMMARY: Alcohol's impact on pregnancy and FASD

- Alcohol use in pregnancy can damage the fetal brain and lead to FASD in the child, which is a serious lifelong disability.
- FASD is different from person to person. Individuals with FASD may have many different physical conditions and negative life experiences that are related to their permanent brain damage.
- Alcohol and other drugs should be completely avoided during pregnancy and breastfeeding.




SLIDE 70


We've discussed a great deal in Unit 2 details about the negative impact of alcohol exposure during pregnancy. In summary, it will be important for everyone to remember the following:

- Alcohol use in pregnancy can damage the developing brain and can lead to fetal alcohol spectrum disorder in the child. FASD is a serious and lifelong disability that will require various supports across the life span in order for individuals to live most successfully and to be well positioned to live their best life.
- FASD is different from person to person and it depends on the amount of alcohol consumed when the alcohol was consumed and what other protective or risk factors are contributing to the situation. Individuals with FASD may have many different physical conditions and negative life experiences that are related to their permanent brain damage.
- It is also really important to understand that people who are experiencing fetal alcohol spectrum disorder also have amazing strengths which need to be identified honored and nurtured... But there are significant struggles for each and this cannot be forgotten and needs to be emphasized in our prevention efforts.
- Alcohol and other illicit drugs should be completely avoided during pregnancy and breastfeeding. Time should be spent with our medical providers to discuss any substances that we put in our bodies when planning a pregnancy and/or once we know that we are pregnant because there are risks associated with all medicines and the cost benefit analysis really needs to be investigated thoroughly through evidence informed approach guided by your medical provider (who is hopefully FASD informed.)

In Indigenous cultures, there's a great big giant concept that the baby is considered a spirit from the Creator, and one of the words we have for that is "Manitoonse", which means "a little spirit being". So, in the indigenous cultures, especially the Anishinaabe people and in Anishinaabemowin, which is the language of these people, and again Ontario has a lot of people who identify from this nation of Anishinaabe people - is that there are teachings that speak specifically to alcohol and not to drink alcohol. One way that was expressed was by the old people saying "Gaa Win Minikway Ish Ko Day Waa Bo" - which essentially means "don't drink firewater". "Firewater" is the word in the language that refers to alcohol. So, it's like the old people knew that when alcohol was brought to their territories, they knew the damage that alcohol could cause to The Unborn Child. In other words, the "little Spirit being" could be harmed by drinking this firewater and that's why the teaching was given many, many years ago was simply stating "Gaa Win Minikway Ish Ko Day Waa Bo" - again "don't drink the firewater". That speaks to this ability for people to support each other in good ways and remember that being a partner is someone who can support people in that people can look after each other in a good way – in a beautiful, loving and caring way. That speaks further to Anishinaabemowin teachings that speak to the idea of children being raised in a healthy, loving, caring environment and these children could be referred to as the Anishinaabe children and that "Ombig Igos Owin" is a word that speaks to raising these children. "Abinojjiak" is another way to say "child" in the Anishinaabe language. "Abinojjiak" are "these children".



UNIT 3
**Compassion, understanding and non-judgmental support
of healthy pregnancies, free of alcohol and drugs**



SLIDE 71 – BEGINNING OF UNIT 3

Unit 3 will focus on how we all can support alcohol and drug free pregnancies. We must practice and offer compassion, understanding and non-judgemental support to pregnant women and their partners, now and later in life. This unit provides us with practical strategies we can use to promote healthy pregnancies in our communities.

How many women in Canada drink while pregnant or breastfeeding?

10%

Consume alcohol
during pregnancy
(Among them, 3%
binge: 4+ drinks
per occasion)

20%

Consume alcohol
while breast-
feeding



SLIDE 72

We still have a lot of work to do and again we are emphasizing the need for us to all do this together. Currently, at least 10% of women admit to consuming alcohol during their pregnancy and this number is on the rise ... Of the 10% who admit to consuming alcohol during pregnancy, 3% of them acknowledged binge drinking while pregnant, which involves 4 plus drinks per occasion and greatly increases the risk to the baby.

It's also really significant to acknowledge that 20% of women share that they consume alcohol while breastfeeding which we know can negatively impact the baby's development as well.

FASD affects us all

- Alcohol use in pregnancy and FASD impacts not only the mother and child, but also **families, communities and society.**
- We must work to **support alcohol-free pregnancies** and to be respectful of individuals and families affected by FASD.
- **We are ALL responsible for FASD prevention!**



SLIDE 73

It's important to understand that FASD affects all of us. Alcohol use in pregnancy and FASD in particular, impacts not only the mother and the child directly involved, but also families, communities, and society in general.

It's really important for all of us to remember that we must work together to support alcohol free pregnancies and to be respectful, understanding, tolerant, compassionate, and accepting of individuals and families who are experiencing the impact of prenatal alcohol exposure including those who may be affected by fetal alcohol spectrum disorder.

And finally, it's really important for all of us to recognize that we are all responsible for FASD prevention. We all can make a difference, and this is really exciting when you think about how many people are negatively impacted by alcohol use today and what things might look like 10 years from now if we all work collaboratively to help decrease the risk of alcohol exposure during pregnancy.

It is our belief that we've always been able to raise healthy children because we knew of our ancient laws. For instance, some of these laws said that we should never laugh at a child – “Gay Go Wiika Baa Pi Aaken Abinoojii” – this is one of our traditional child rearing teachings. Anishinaabe people believe that the Creator gave them some really amazing ways to ensure that their Nation would last forever and these are some of the teachings amongst our people.

Naomi - Birth mother of a person with FASD



SLIDE 74

Next, we will watch a video from the perspective of Naomi, a birth mother of a person with FASD. Birth mothers of children with FASD typically face a great deal of stigma, even though the circumstances for their alcohol use during pregnancy are typically complex, and usually they did not even KNOW about the harmful effects of alcohol use during pregnancy.

In adulthood, we must promote healthy pregnancies and prevent FASD



SLIDE 75

As mentioned before, FASD prevention is EVERYONE'S responsibility. It is important to know this as we become adults, when we will really find ourselves in situations where we can influence others positively in our communities and prevent FASD, for example. As part of FASD prevention, we must continue to understand the impacts of alcohol use in Indigenous and non-Indigenous communities, as well as what may influence individuals to use alcohol in general and during pregnancy. By understanding the root causes of alcohol use in pregnancy and FASD, we are able to really offer that non-judgemental, compassionate support that we need to promote healthy pregnancies in our various communities.

During all of this, we MUST provide support and celebrate strengths of individuals and families affected by FASD.

Discussion question

What can we, as partners, friends, and family members, do to support women/girls who are pregnant to avoid alcohol use or seek help to reduce alcohol use?



SLIDE 76

Now let's think about possible ways of helping women abstain from alcohol and drugs during pregnancy. The teacher can now press pause on this slide to read the question and guide the discussion in your class.

Supporting mothers and children

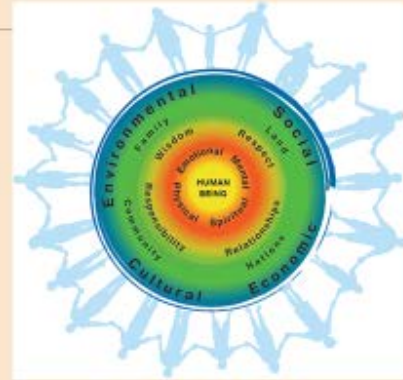


SLIDE 77

Now let's take a moment to watch a video of Myles again, this time on how to support mothers and children affected by FASD.

Strategies to support alcohol-free and drug-free pregnancies

- Staying healthy and balanced helps puts you on the path to support and have alcohol-free pregnancies later in life.
- **Pursue activities** where it is easy to remain sober (e.g., going to a movie theatre instead of a party). Connect to the land as much as possible, attend ceremonies and attend dry, non-alcohol events.
- **Nobody should pressure anyone** to drink in social situations. The choice to abstain should be respected – people don't need to give you a reason!
- **Non-alcoholic beverages** should be made available and offered equally, without judgment.
- **Men/partners** can help reduce stress, ensure healthy relationship dynamics, and use family planning as needed.



SLIDE 78

Several effective, compassionate ways have been identified to support alcohol and drug free pregnancies.

- Firstly, staying healthy and balanced puts you on the path to support alcohol-free pregnancies, as well as to have healthy pregnancies later on in life.
- Another strategy to abstain from alcohol use during pregnancy would be to pursue alternative activities where it is easy to remain sober. For example, one might choose to go to a movie Theatre with some friends rather than a loud party where there is going to be music, *dancing* and other activities commonly associated with alcohol consumption. It is important to stay connected to the land as much as possible, to attend cultural ceremonies and to attend alcohol-free and drug-free events. Nobody should pressure anyone to drink in social situations; nobody knows what's going on with individuals and they have a right to choose. The choice to not drink or abstain from alcohol should be respected at all times and people do not need to give a reason for their decision to not to consume alcohol.
- Non-alcoholic beverages should be made available and offered equally without judgment. So, whenever there's a beverage offered, we should always include a non-alcoholic choice; this will normalize the fact that many of us don't want to consume alcohol and that choosing non-alcoholic beverages completely normal and fine and a choice often made for people who want to live a healthy lifestyle.
- It's also important to remember that partners have a really important role to play in terms of promoting alcohol and drug-free pregnancies by:
 - reducing stress
 - ensuring healthy relationship dynamics

- be a part of family planning as required
- The partner can also make it easier for the pregnancy to be alcohol free by choosing to not drink themselves or to support their partner in various ways that help to ensure that the pregnancy is not exposed to alcohol

Alcohol/drug-free pregnancy support strategy:

Increase awareness by educating others on the risks of drinking while pregnant

COMMON MISCONCEPTION	FACT
A pregnant woman having one drink every once in a while isn't going to harm the baby.	Each sip of alcohol negatively affects fetal development.
A woman can drink during her pregnancy – I drank during mine and my child is just fine!	Alcohol exposure in the womb affects each child differently and the effects of it are not always known/visible.
Since she already drank before she knew she was pregnant, she might as well just keep drinking now. The damage is done.	Once you know you're pregnant, you should stop drinking immediately. If you need help doing so, you should seek support from medical professionals.
Of course a pregnant woman shouldn't drink vodka, but drinking wine or beer won't harm the baby at all.	There is no safe type of alcohol to drink during pregnancy – even drinks with lower alcohol concentrations can be harmful to the fetus.



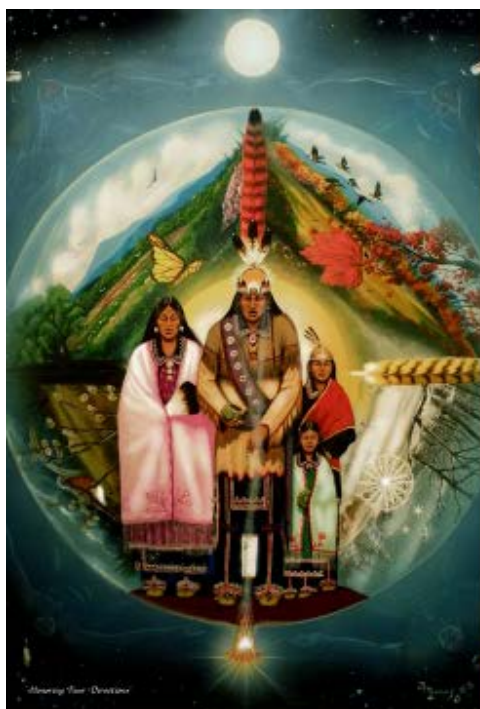
SLIDE 79

This slide describes an alcohol and drug free pregnancy support strategy because we understand that increased awareness by educating others on the risks associated with drinking while pregnant will lead to improved outcomes and reduced numbers of babies exposed. This is something you can work on now, well before the time you intend to start your own family. We need to affect positive change and part of that is refuting common misconceptions with facts you have learned today. These misconceptions are not only among youth, but are also found in some conversations among adults, where these misconceptions unfortunately influence decision-making around alcohol use in pregnancy.

- For example, it is common for people to think and say that a pregnant woman having one drink every once in a while, isn't going to harm the baby. we now know that this is simply untrue and that every sip of alcohol contains toxins that do no good and can certainly negatively affect fetal development at any time from conception to the end of pregnancy.
- Another common misconception is the assumption that a woman can drink during her pregnancy because other women have done it and they perceive it to not be harmful. Some might say “I drank during mine and my child is fine” ... But unfortunately, alcohol exposure in the womb affects each child differently and the effects are not always clearly understood or clearly visible. But that does not mean that there's not been lost potential. A fetus is ALWAYS healthier when not exposed to alcohol.
- Another common misconception is the understanding that ‘she already drank before she knew of the pregnancy so she might as well just keep drinking.... the damage is already done in those early month’. This is also not true! We do know

that the less amount of alcohol consumed the better off the baby will be at birth and throughout life. Avoiding alcohol can reduce the risk of further damage. Once a woman knows that she is pregnant she should stop drinking immediately and if she needs help doing so, she should seek support from medical providers and supports in community.

- Another common misconception is that certain types of alcohol can cause more damage than others, for example “of course a pregnant woman shouldn't drink vodka but drinking wine or beer won't harm the baby at all”. This goes back to the common misconception that wine is healthy, for example, but we know that this is not the case either because alcohol is alcohol and there is no safe type to drink during pregnancy and even alcohol with lower concentration, even one serving size can be harmful to the developing fetus.



Knowledge Keepers and Elders

Knowledge Keepers and Elders are trusted, valuable helpers in the community who can offer wisdom and guidance.

Strategy: Support people who are pregnant or have birthed a child to talk to people they trust about the knowledge in your community!



SLIDE 80

Individuals in Indigenous communities have access to Knowledge Keepers and Elders. These are trusted, valuable helpers in the community who can offer Indigenous people's wisdom and guidance as we seek to stay balanced, resilient and well. Knowledge Keepers and Elders can provide us with the support we need to start healthy, happy families.

As a strategy, we can support Indigenous individuals who are pregnant or even those who have birthed a child recently to talk to people they trust about the knowledge that is available in their community. This may include a Knowledge Keeper or Elder, but could also be an Indigenous midwife for example, or even a community health worker in a cultural centre.

Alcohol/drug-free pregnancy support strategy

Encourage pregnant women with alcohol and addiction issues to **seek treatment and support** from:

- Family doctors
- Obstetricians/ gynecologists
- Nurses or midwives
- Community health centres
- Home-visiting programs (e.g., 'Healthy Babies Healthy Children' program in Toronto)
- Cultural centres
- Substance use treatment services



SLIDE 81

Another aspect to alcohol and drug free pregnancy support strategies includes the delicate conversations around addictions with people who really struggle with alcohol use. It's important for all of us to understand that we can do our part to encourage pregnant women with alcohol addiction issues to seek treatment and support in a kind non-judgmental, non-stigmatising way.

- We can help individuals seek support through their family doctors
- through their obstetricians and gynecologists
- through a nurse or midwife
- through community health centres and a variety of health promotion initiatives
- through home visiting programs for example healthy babies healthy children and through cultural centres
- and through substance use treatment services.

It was said that before the arrival of the newcomers to the Indigenous people territories, there really wasn't any word for "addiction" in the modern-day sense as we know it. But, there was a word for "hope" and amongst Anishinaabemowin people, the language of that people, is the word "Bagosendaan" and that word essentially translates to "having hope" and that's what all of these people can provide to individuals is to have them have that idea of providing hope to them. The idea about our teachings is that there really does exist this concept of being a child. and then being a young adult, and being a man or woman, and then becoming an Elder or an older person. When you look at other indigenous teachings across our province of Ontario you will find out in the Anishinaabe philosophy, there's a concept that's called "spirit world" and in the spirit world that's where birth occurs and that's where birth

comes from. Prior to the birth happening to be, there is this idea that the child is given certain strengths and certain gifts and certain qualities at the time of conception. Before conception, there's the spirit world, then there's conception, and then there's birth and that birth happens and that child is born with all of these beautiful strengths and abilities and amazing ideas that they will have in their life. We now know that alcohol can impact and impair and actually prevent some of these beautiful gifts from occurring, so that's how Indigenous people understand FASD.

Alcohol/drug-free pregnancy support strategy:

When the time comes, stay sober with your pregnant friend(s)



SLIDE 82

This slide gives some great examples of how we all can support alcohol free pregnancies. If we know that our friends are pregnant maybe this would be a good time for us to choose a non-alcoholic beverage, and especially in their presence. This prevents pregnant women from feeling left out, and such support is always appreciated.

We can also introduce an activity to participate in that will be less likely to involve alcohol consumption. The messages within this slide are really hopeful and helpful and should be shared.

Alcohol/drug-free pregnancy support strategy:

In adulthood, women and their partners can make every trimester a **#Drymester** and influence others to do the same



SLIDE 83

Another strategy to support alcohol free pregnancies has been found to be helpful and successful has been centered on being alcohol-free together during pregnancy. “Drymester” is a campaign that was created to inspire and support alcohol free pregnancies even in the planning stages. This campaign recognizes that there are a lot of different and conflicting messages out there, but they are being clear about the facts: there's no safe time no safe amount and no safe kind of alcohol to drink during pregnancies.

The picture in this slide highlights that both parents are involved in this circumstance which is really helpful. It makes sure that the mother-to-be recognizes that she has a role to play to ensure that the pregnancy is as healthy as it can be. And so does her partner, they are in it together they're smiling they're happy they're hopeful and they are committed. This campaign allows for people to come together and to support each other ... and to have knowledge about Safe choices that will more likely lead to their baby having the best start possible. When it comes time for us to begin our families, we should make every trimester a drymester and influence others to do the same by setting this example in our communities.

Alcohol/drug-free pregnancy support strategy:

Use adequate contraception/family planning if using alcohol, and encourage others to do the same

Both women and their partners should be responsible for ensuring there is family planning and that pregnancies are alcohol-free and drug-free.



SLIDE 84

Lastly, both women and their partners should be responsible for ensuring that there are family planning strategies and that the pregnancies are alcohol and drug free ... this is not solely the mother's responsibility. It's up to all of us to create opportunities to have these conversations to work together to use contraception appropriately and to promote healthy pregnancies

In the Anishinaabe worldview, the idea of our laws that govern our nations come from Creator. One of these laws is called "Gagige Inaakonigewin"- in other words, our people, the Anishinaabe people, the people that live here in Ontario, always believed that God gave our people laws on how to be healthy, happy and spiritual and we refer to these laws as "Gagige Inaakonigewin" - in other words they were forever laws and they came from Creator. Our word for Creator is "Gi Zhay Manido" - is like a benevolent being, a spirit being and that's our word for God. Within the laws is the idea of how to raise our children and our Nation should be and how we should treat each other with respect and kindness, to be kind and gentle. Under these laws there's another law that's called "Katay Inaakonigewin" - this means "ancient laws". So, it's our belief that we've been always able to raise healthy children because we knew of these ancient laws. For instance, some of these laws said that we should never laugh at a baby or poke fun at a baby or to mock a baby and that's just plain simple and common sense, but they really stem from these beliefs amongst the Anishinaabe people in Ontario that the Creator gave them some really amazing ways to ensure that their Nations would last forever and these are some of the teachings that we have amongst our people.

Key message: Alcohol and pregnancy don't mix!

The safest, healthiest choice is to **NOT drink at ALL (any amount or type), at any point while:**

- At risk of becoming pregnant
- Planning for a baby
- Pregnant
- Breastfeeding



SLIDE 85

The most important message to take away from this learning into certainly share amongst our own social circles is a very clear one. Alcohol and pregnancy don't mix! The safest, healthiest choice is to not drink alcohol at all. This means that there is no safe type, no safe amount, and no safe time during the pregnancy. It is also the safest and healthiest choice not to drink at any point while there is a risk of an unplanned pregnancy or a chance that one could become pregnant; while planning for a baby, while pregnant and while breastfeeding. We know now that even small amounts of alcohol can negatively impact the growing baby and the young person up until the age of 25 while the brain is still under construction. We also know that alcohol provides absolutely no nutritional value particularly to the growing fetus and baby, so it just makes really good sense to not consume any types of alcohol at all that might interfere with your baby's development and their ability to reach their potential. It is everyone's responsibility to support alcohol and drug free pregnancies, and with the information you have learned in this module, you are ready to take this on.

Anishinaabe people, in our languages, we have words as I described earlier of how to take care of each other. One of the ways we say that in the language is "Baa Mi I Dig" which means "to take care of each other". We can also add the word "Mino Baa Mi I Dig" which means "to take care of each other in a good way". In our language, the Anishinaabe word for partners "Wii Jii Waa Gan" - means that that person is our partner and so we take care of each other in a good way, we kind of look at this idea that one day, this person is going to be allowed to give birth to an unborn child and that unborn child has certain qualities and gifts. If alcohol is introduced at any part during that pregnancy, it can harm that little unborn spirit. Our word for that in the language is "Gi Gish Ka Waa Waso" - it means that's a little egg that's growing inside that woman and that really is going to become a beautiful spirit "Manitoonse". These are some

of the teachings are very, very powerful amongst indigenous people here in our province of Ontario. We always have to remember that we have our teachings that can guide us to be happy, to be healthy, and to be spiritual.

CASE STUDY ACTIVITY

- 1. The teacher can divide students into 3 groups, use this activity as an overall class discussion OR use as an independent assignment.**
- 2. Students can analyze each scenario and answer the related questions.**



SLIDE 86

Your teacher will now facilitate a case study activity. The teacher can now press pause on this slide to read the instructions and decide how to proceed.

Case study 1: Smita

Smita and her husband John have recently decided to try to become pregnant. With their decision in mind, Smita has been taking precautions to prepare herself for a healthy pregnancy. On New Year's Eve, she and her husband attend a party where people are drinking heavily. "Oh, come on, silly," her friend Nikki laughs. "One drink won't hurt you!"

1. Identify the decision Smita needs to make.
2. Identify options and possible consequences.

SLIDE 87 (no narration)

STUDENT QUIZ ACTIVITY

1. The teacher will now distribute the quiz to students.
2. Students can work through the questions together as a class or use as an independent assignment to take home.



SLIDE 90

Your teacher will now distribute the student quiz to the class. The teacher can now press pause on this slide to read instructions and carry out this activity.

Student quiz

1. One can always identify a child with FASD by the way they look.
 - a) True
 - b) False

SLIDE 91 (no narration)

Student quiz

- 2.** FASD is the leading known cause of developmental delay in Canada.
- a) True
 - b) False

SLIDE 92 (no narration)

Student quiz

- 3.** If alcohol is completely avoided during pregnancy, the child will not have FASD.
- a) True
 - b) False

SLIDE 93 (no narration)

Student quiz

4. It is okay/safe for a pregnant woman to have alcoholic drinks that are less strong (wine, beer, cocktails) than hard liquor (e.g., vodka, whiskey).
- a) True
 - b) False

SLIDE 94 (no narration)

Student quiz

5. When is it completely safe for a woman to drink during her pregnancy?
- a) First 3 months (1st semester)
 - b) Mid-pregnancy (2nd semester)
 - c) Late pregnancy (3rd trimester)
 - d) All stages of pregnancy
 - e) It is not safe at ANY point in pregnancy

SLIDE 95 (no narration)

Student quiz

6. On average, what proportion of women drink alcohol during pregnancy in the general population of Canada?
- a) Less than 1%
 - b) Between 2-3%
 - c) Between 15-20%
 - d) Approximately 10%

SLIDE 96 (no narration)

Student quiz

7. In the general population of Canada, what proportion of individuals are affected by FASD?
- a) Less than 1% (less than 375,900 people)
 - b) Between 1-2% (between 375,900 and 751,800)
 - c) Approximately 4% (about 1.5 million people)

SLIDE 97 (no narration)

Student quiz

8. When a pregnant woman drinks alcohol, the alcohol can have a ____ effect on her baby, in the long-term?
- a) Behavioural
 - b) Social
 - c) Mental
 - d) Physical
 - e) All of the above

SLIDE 98 (no narration)

Student quiz

9. To help prevent FASD, it is necessary to:
- a) Completely avoid all alcohol (in any type/amount) when pregnant or at risk of becoming pregnant
 - b) Help our pregnant friends avoid alcohol
 - c) Use family planning/contraception if at risk of having an alcohol-exposed pregnancy
 - d) Educate others on the risk of alcohol in pregnancy
 - e) Provide support to those with addictions issues
 - f) Help pregnant women with addictions seek available supports
 - g) All of the above

SLIDE 99 (no narration)

Key message: Alcohol and pregnancy don't mix!

**NO ALCOHOL IN
PREGNANCY
=
NO FASD IN THE
CHILD**



SLIDE 100 (no narration)

Acknowledgements

- This project was funded by the Public Health Agency of Canada (PHAC).
- The curriculum was developed and culturally adapted by the Principal Investigator; CAMH project team; Shkaabe Makwa; and Project Steering Committee, which includes individuals from First Nations communities who have lived experience.
- This recording was narrated by Angela Geddes, MSW, RSW; and Ron Linklater.



SLIDE 101

closing song

Prevention of Alcohol Use in Pregnancy and Fetal Alcohol Spectrum Disorder (FASD) Lesson Plan Guide for Teachers of Health and Physical Education (Grades 7-12)

This lesson plan was developed by Centre for Addiction and Mental Health (CAMH) team as part of the project entitled: “*FASD Prevention school-based program for children and adolescents in select urban, rural and First Nations schools in Ontario, Canada*”, funded by the Public Health Agency of Canada (PHAC) Fetal Alcohol Spectrum Disorder (FASD) National Strategic Projects Fund.

LESSON PLAN OUTLINE

This lesson is an interactive set of modules, which are intended to raise awareness about detrimental consequences of alcohol use in pregnancy and Fetal Alcohol Spectrum Disorder (FASD), for students in Health & Physical Education classes in grades 7-12. FASD refers to a range of disorders that can affect individuals who were exposed to alcohol before birth. The following lesson plan aims to highlight the risks of alcohol use in adolescence, as well as the importance of abstaining from alcohol use before and during pregnancy. It is important to engage students in this preconception FASD prevention initiative, as this is a key period in which alcohol use and sexual risk behaviours are initiated.

This lesson plan is also informed by the cultural perspective of the narrator, who speaks on their lived experiences as a First Nations person from Couchiching First Nation in Ontario, sharing important cultural teachings related to alcohol use and pregnancy.

Time requirement

This lesson plan is meant to be implemented in 3-4 consecutive days, approximately 55-65 minutes each class. The lesson time may vary depending upon the speed at which the material is covered and the degree of student participation.

Lesson Plan objectives

The objectives of this lesson plans are to provide students with evidence-based information on:

5. Impacts of alcohol use on teenage health
6. Impacts of alcohol use in pregnancy
7. The life course of individuals with FASD
8. Strategies to support substance-free pregnancies

Lesson Plan Contents

This curriculum includes:

5. Background information for teachers
6. Recording(s) of lesson plan lectures, consisting of 3 units
7. Step-by-step instructions for engaging with students during directed class discussions and in between units
8. Information resources for teachers

BACKGROUND INFORMATION FOR TEACHERS

Why teach about FASD?

Educational campaigns increase knowledge about the effects of prenatal alcohol exposure and are foundational to other levels of FASD prevention in Canada. Evidence-based strategies and activities that promote learning and well-being are provided in alignment with curriculum expectations and the *Foundations for a Healthy School* substance use-specific strategies and activities. The prevention of alcohol use in pregnancy is aligned with the WHO

initiatives to prevent chronic diseases¹¹ and initiatives to reduce the harmful use of alcohol globally.¹² Remarkably, it has been estimated that preventing one case of FASD incurs only 3% of the costs it would require to provide support services to individuals with FASD.¹³ FASD prevention initiatives, therefore, have the potential to save service systems considerable costs.

In Canada, public health agencies assert the message that there is no safe amount, no safe time, and no safe kind of alcohol to drink during pregnancy, which is endorsed by FASD researchers and Health Canada.^{14,15} This message is also displayed in obstetric guidelines⁵, and the Centre for Disease Control also endorses complete abstinence, adding that alcohol should be avoided in women who could become, or are trying to become, pregnant. Even with these public health efforts, an estimated 10% of pregnancies in Canada are alcohol-exposed¹⁶ and an estimated from 2.5%¹⁷ to 4% of Canadians in the general population have FASD¹⁸, which emphasizes the need for further prevention activities.

Why this age group?

Providing age-appropriate education before conception can help reduce the risk of alcohol-exposed births. Schools exercise a powerful influence over young people, making them ideal settings to educate about the dangers of drinking alcohol during pregnancy. Alcohol consumption rates are increasing among women of childbearing age, due to increased availability and advertising of alcohol. It is important to educate students, as rates of alcohol consumption are high among Ontario students and it has been shown that current attitudes and drinking behaviours tend to predict alcohol use in pregnancy later in life.¹⁹ Levels of alcohol consumption among young women in Canada are increasing, including binge drinking. In Ontario, 42.8% of girls in grades 7-12 reported past year alcohol use and 21.4% reported binge drinking in the past month.²⁰ Between grades 7-12, alcohol use patterns increase over time; past-year alcohol use increases from 7.3% to 66% and past-month binge drinking increases

¹¹ World Health Organization (2014a). WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020. Available from: [file:///C:/Users/16478/Downloads/9789241506236_eng%20\(1\).pdf](file:///C:/Users/16478/Downloads/9789241506236_eng%20(1).pdf)

¹² World Health Organization (2014b). Guidelines for the identification and management of substance use and substance use disorders in pregnancy. Available from: https://apps.who.int/iris/bitstream/handle/10665/107130/9789241548731_eng.pdf;jsessionid=528480BDEF513AE9130A22E5EB1C182E?sequence=1

¹³ Greenmyer, J. R., Popova, S., Klug, M. G., & Burd, L. (2019). Fetal alcohol spectrum disorder: A systematic review of the cost of and savings from prevention in the United States and Canada. *Addiction* (Abingdon, England), 115(3), 409-417.

¹⁴ Zizzo, N., & Racine, E. (2017). Ethical challenges in FASD prevention: Scientific uncertainty, stigma, and respect for women's autonomy. *Canadian Journal of Public Health-Revue Canadienne de sante Publique*, 108(4), E414-E417.

¹⁵ Graves, L., Carson, G., Poole, N., Patel, T., Bigalky, J., Green, R. C., Cook, J. L. (2020). Guideline No. 405: Screening and counselling for alcohol consumption during pregnancy. *Journal of Obstetrics and Gynaecology Canada*, 42(9), 1158-1173.

¹⁶ Popova, S., Lange, S., Probst, C., Parunashvili, N., & Rehm, J. (2017). Prevalence of alcohol consumption during pregnancy and Fetal Alcohol Spectrum Disorders among the general and Aboriginal populations in Canada and the United States. *European Journal of Medical Genetics*, special issue on updates in "Teratology and The Fetal Alcohol Spectrum Disorders", 60(1), 32-48. doi: 10.1016/j.ejmg.2016.09.010

¹⁷ Popova, S., Lange, S., Poznyak, V., Chudley, A.E., Shield, K.D., Reynolds, J.N., Murray, M., Rehm, J. (2019). Population-based prevalence of fetal alcohol spectrum disorder in Canada. *BMC Public Health*, 19(1), 845.

¹⁸ Thanh, N. X., Jonsson, E., Salmon, A., Sebastianski, M. (2014). Incidence and prevalence of fetal alcohol spectrum disorder by sex and age group in Alberta, Canada. *Journal of Population Therapeutics and Clinical Pharmacology*, 21(3), e395-e404.

¹⁹ Skagerström, J., Chang, G., Nilsen, P., Linköping, U., & Hälsouniversitetet. (2011). Predictors of drinking during pregnancy: A systematic review. *Journal of Women's Health*, 20(6), 901-13. doi: 10.1089/jwh.2010.2216.

²⁰ Boak, A., Elton-Marshall, T., Mann, R.E., Hamilton, H.A. (2019). Drug use among Ontario students: 1977-2019. Detailed findings from the Ontario Student Drug Use and Health Survey. Available from: https://www.camh.ca/-/media/files/pdf---osduhs/drugusereport_2019osduhs-pdf.

from 1.1% to 28.2%. respectively.¹⁰ Alarming, in 2019, 15% of high school students (1 of every 7) reported symptoms consistent with a substance use disorder.¹⁰

Using this lesson plan:

- As a teacher of a participating class in this project, your role will primarily be to facilitate discussions and student activities in this lesson plan. You may not use any of the activities for the purposes of assessing the student in the respective course you teach. These activities are part of the CAMH research project only.
- The following are key words used in this lesson plan, which you may want to be familiar with beforehand:
 - Fetal Alcohol Spectrum Disorder (FASD)
 - Prenatal
 - Addiction
 - Mental/behavioural disorders
 - Carcinogen
 - Toxin
 - Teratogen
 - Coping mechanisms/strategies
 - Social/peer pressure
 - Stigma
 - Disability
 - Developmental delay
 - Central nervous system
 - Abstinence
 - Tobacco
 - Cannabis
 - Opioids
 - Illicit drugs
 - Breastfeeding
 - Prevention
 - Misconception

LESSON PLAN

UNIT 1: Impacts of alcohol use on teen health

Estimated time: 65 minutes (45 minutes for pre-recorded lecture and 20 minutes for discussion)

Student learning objectives:

- Students should understand that alcohol impacts all bodily systems negatively (internal and external).

- Students should understand that alcohol is unhealthy at any age, but especially dangerous for youth as their brain is still developing.
- Students should be able to identify benefits to staying sober and strategies to turn down alcohol, if that is their choice.

Discussion questions and considerations

In this lesson plan, the content is pre-recorded, except for the following questions. Teachers are expected to ask the following questions (as directed) and facilitate discussion among students in the class.

- 6. “What might influence teenagers to use alcohol and/or other substances?”**
 - a. If needed, prompt students to think of life circumstances, social/environmental context, and individual life changes
 - b. Encourage students to think broadly and to not identify themselves or their peers in any of the answers provided
 - c. Do not offer the students anecdotes or provide your own answers
 - d. Spend 2-3 minutes on this discussion and check to ensure all students have had a chance to provide an answer
- 7. “Can you name some risks related to drinking alcohol?”**
 - a. Encourage students to reflect on what they have learned in biology and health studies, or what they have seen in the media.
 - b. Should the students include an anecdote in their answers, bring the discussion back and emphasize that no anecdotes should be given.
- 8. “Which organs/systems of the body can be negatively affected by alcohol?”**
 - a. Encourage students to name at least 5 systems before moving onto the next slide.
 - b. If needed, provide “digestive system” as an example. Connect this to previous material you have taught, if applicable.
- 9. “What are some benefits (health or other) of being/staying sober in the short-term or long-term?”**
 - a. Encourage students to name a range of benefits related to being alcohol-free and/or drug-free.
- 10. “What are some healthier activities teens could choose instead of using alcohol or other substances?”**
 - a. Encourage students to provide a total of 10 activities before moving on.
 - b. Students should name healthy lifestyle choices such as exercise.

Considerations: Content

- Students will naturally tend to reflect on their own experiences and that of their peers, related to substance use and associated risks. If time permits, you may want to monitor students’ reactions to the content to see if they may benefit from follow-up lessons/activities later in the academic year.

- Though it is emphasized in the beginning of the recording, you may need to remind students to maintain a respectful learning environment and emphasize that no references can be made to past or present individual behaviours.
- For the purpose of this pilot study, please refrain from including your own views of alcohol and substance use until after all student data have been collected (you will be notified).
- If prompted by students to provide your own perspective or your own current substance use behaviours (e.g., “do YOU buy alcohol at the grocery store?”), please divert the attention to the purpose of this lesson plan and the significant impacts for youth.
- Some students in your class may use substances, and it is important that we provide them with the healthiest choice (i.e., zero alcohol and other substances is best) using gentle language.

UNIT 2: Impacts of alcohol use in pregnancy and Fetal Alcohol Spectrum Disorder (FASD)

Estimated time: 55 minutes (45 for pre-recorded lecture and 10 minutes for discussion)

Student learning objectives:

- Students should understand that alcohol is harmful to the developing brain and other organs of the fetus, and it may cause FASD, the most dramatic manifestation of prenatal alcohol exposure.
- Students should demonstrate an understanding of the multiple different factors (such as peer pressure; pregnancy planning; relationship/family dynamics; psychological trauma; limited access to healthcare/education), which may lead to alcohol use during pregnancy.
- Students should demonstrate a clear understanding that pregnant women should completely abstain from alcohol and other drugs during pregnancy.
- Students should understand that FASD is a lifelong disability, with many physical, mental and behavioural problems to individuals who have the condition.

Discussion questions and considerations

Teachers are expected to ask the following question (as directed) and facilitate discussion among students in the class.

2. “Can you think of what may influence some women to drink alcohol while they are pregnant?”

- a. If needed, prompt students to think of life circumstances, social/environmental context, and individual life changes.
- b. Encourage students to think broadly, to not use personal stories or the experiences of anyone they may know, in their answers.
- c. Only in the case that students mention “abortion” as a potential reason for drinking alcohol while pregnant (a misconception), please emphasize to students that this is largely a myth and that large amounts of alcohol don’t

necessarily cause an “abortion” (rarely, if ever), but can actually be very harmful to a pregnant woman and her baby.

- d. In case students use the term “alcoholics”, encourage them to use different phrasing such as “individuals with alcohol addiction”. Using the latter term emphasizes that people are not defined by their struggles.

Considerations: Content

- In general, this unit teaches about pregnancy, which therefore implicitly focuses on romantic relationships where a pregnancy can happen. Please be mindful that students may have different gender identities and sexual orientations, so it is important to use inclusive language in discussions, where possible and as appropriate.
- Students may naturally think about their own possible prenatal exposures. They may also try to “self-diagnose” themselves or their peers with possible FASD. This is typical behaviour upon first being introduced to FASD and should not be a cause for concern in and of itself. If needed, it may benefit students to explain that prenatal alcohol exposure occurs relatively often and does not necessarily cause FASD. As well, there may be some protective factors that have mitigated the risk of FASD in students (e.g., nutrition).
- Based on current statistics, it is possible that 1 out of 25 students may have FASD. Therefore, the language in the lesson plan has been made to be as strengths-based as possible and is non-stigmatizing, which is intended to foster respect and support of people with disabilities from classmates.
- In this unit, students are only shown pictures of mice with prenatal alcohol exposure and the associated facial features. It is possible, however, that students may already be familiar with the human facial features of FAS or may start to Google this concept or discuss it in the class. If this behaviour occurs, make it clear to students that only a trained professional (usually medical doctor) can identify these features by using special tools like rulers or software. In addition, only a small percentage (less than 10%) of individuals with FASD may have these facial features.
- This unit discusses mental, behavioural and learning problems related to FASD. It may be useful to make it clear to students that these issues are not only associated with FASD but could also be indicative of other medical conditions or life experiences.
- Students may comment on the appearance of individuals with FASD shown in photos or videos in this unit. Encourage students to keep such conversations respectful, while possibly emphasizing that people with FASD indeed look different, from person to person.
- This unit also briefly discusses the risks of alcohol use while breastfeeding. Students may have heard of a “pump and dump” technique, but this is beyond the scope of this lesson plan. If this point is raised, simply emphasize that all women metabolize alcohol differently, and that the safest (most ideal) choice is to abstain from alcohol while breastfeeding.

UNIT 3: Supporting alcohol-free and drug-free pregnancies

Estimated time: 25 minutes (15 minutes for pre-recorded lecture and 10 minutes for discussion)

Student learning objectives:

- Students should understand that FASD prevention is a shared responsibility between partners, families, and communities.
- Students should be able to identify common misconceptions about alcohol use in pregnancy and how to refute such ideas with evidence-based responses
- Students should be able to identify ways in which they can support alcohol-free pregnancies, now and later in life.

Discussion questions and considerations

Teachers are expected to ask the following question (as directed) and facilitate discussion among students in the class.

2. **“Thinking back to what may influence women to drink alcohol during pregnancy, what are some ways we can help pregnant women abstain from alcohol and other drugs?”**
 - a. If needed, prompt students to think of what they can do or say when a family member or friend is pregnant that would support abstinence in a respectful way.
 - b. Encourage students to speak hypothetically instead of offering personal anecdotes.

Considerations: Content

- If needed, emphasize to students that no woman wishes to intentionally harm her unborn baby, and that blaming or shaming pregnant women for substance use is ineffective for preventing FASD.
- In this discussion, emphasize the need for students to be good role models by making healthy choices such as abstaining from alcohol use themselves.
- After the completion of Unit 3, emphasize to students that they have a large role to play in spreading FASD awareness with all the information they have just learned. For example, students can actively refute common misconceptions about alcohol use in pregnancy in any conversations, not necessarily only with pregnant women.

CASE STUDY ACTIVITY

Estimated time: 20 minutes

Learning objectives:

To strengthen the students' decision-making skills and enable them to state alternative options to scenarios dealing with alcohol use and pregnancy.

Directions:

3. **Divide students into groups (or break-out rooms if the class is online), use as a class discussion OR use as an independent assignment**
4. **Ask the students to analyze each scenario and answer the related questions.**

Case Study 1: Smita

Smita and her husband John have recently decided to try to become pregnant. With their decision in mind, Smita has been taking precautions to prepare herself for a healthy pregnancy. On New Year's Eve, she and her husband attend a party where people are drinking heavily. "Oh, come on, silly," her friend Nikki laughs. "One drink won't hurt you!"

Possible "correct" answers can include:

3. **Identify the decision Smita needs to make.**
 - Ultimately, Smita needs to decide if she can or should hold her ground in abstaining from alcohol while trying to get pregnant. There is a risk of prenatal alcohol exposure if she is already pregnant at this party and does not know it. While drinking one drink may not "hurt" Smita, it may hurt an unborn child.
 - While it is ultimately up to Smita to make her own choice and voice her decision, preventing alcohol use during pregnancy is actually a shared responsibility for this couple. John can be supportive to Smita by encouraging her to make the safest choice possible (i.e., abstain from alcohol) and by also abstaining from alcohol during this New Year's Eve party.
4. **Identify options and possible consequences.**
 - Smita can say she does not feel like drinking. That way, she can keep it a secret that she is trying to get pregnant, and she can keep her baby safe in case she already is pregnant.
 - If she feels comfortable, Smita can simply tell her friend Nikki that she is trying for a baby and does not want to drink alcohol, just in case. If Nikki still says one drink will not hurt, Smita can clarify that alcohol can negatively impact the fetus even within 2-3 days of conception.
 - This is also an opportunity for John, Smita's partner, to jump in and support this decision, advocating for the safest choice to be made based on public health messaging.
 - To take the emphasis off Smita and her choices, John can emphasize that it is THEIR decision as a couple. He can explain that they both decided to abstain from alcohol during the pregnancy and he wants to support Smita and the growing baby.

- John can also add that Nikki should be supportive of this couple's decision to have an alcohol-free pregnancy.
- If Nikki already knows that Smita is trying for a baby and already knows that Smita is abstaining from alcohol for that reason, Smita should have a private conversation with Nikki about respecting her boundaries.
- Ideally, Smita and John should discuss how to approach this situation beforehand, but if they have not, then they should certainly do so following this scenario. As we know, the pressures to drink alcohol in social settings and on special occasions is significant, and they may encounter this situation again.

Case Study 2: Aidan

“Aidan is a college student. His older sister Megan recently announced that she is pregnant with her first child. Aidan invites Megan out to dinner to celebrate. He starts to order a bottle of champagne, but Megan protests, “I can’t drink because I’m pregnant.” Aidan is confused and hurt that she will not celebrate with him.”

Possible “correct” answers can include:

3. Identify how Megan could respond to Aidan.

- Megan can tell her brother (Aidan) that her decision to not drink alcohol is the healthiest, safest choice for herself and her baby, and not anything personal about not wanting to celebrate with him.
- Megan can suggest other ways to celebrate, such as non-alcoholic drinks or dessert, that would be a healthier choice for herself and the baby.
- Megan can take this opportunity to tell Aidan that alcohol-free pregnancies should be respected and encouraged, as FASD prevention is everyone's responsibility.

4. Discuss the possible options and consequences.

- There may be a conflict if Aidan suggests that alcohol is okay to consume during pregnancy, which Megan knows is not true. Megan can explain to him everything she knows about the risks of alcohol use during pregnancy, stating there is no safe type or amount of alcohol to drink at any point during pregnancy.
- The two siblings can compromise: Aidan can drink champagne and Megan can toast with a glass of water. However, the most supportive action from Aidan would be to stay sober with Megan.
- The two siblings can talk about other things that will have to change during Megan's pregnancy, such as avoiding hot tubs and sushi.
- This may also be a good time for Megan to set a boundary and explain to Aidan that she will abstain from alcohol not only during pregnancy, but also during breastfeeding of the baby.

Case Study 3: Michelle

Michelle has just found out that she is pregnant. During her routine doctor visit, Michelle mentions to her doctor that she has heard that drinking alcohol while pregnant can harm her baby. Her doctor tells her that having a few drinks occasionally will not be harmful to the baby. She is uneasy with his response and leaves with mixed feelings.

Possible “correct” answers can include:

3. What should Michelle do?

- Michelle can (and should!) get a second opinion. She is absolutely correct in that alcohol during pregnancy can be harmful to the fetus.
- Michelle can understand that the opinion expressed by her doctor is based on outdated knowledge, and that now there is a lot of scientific evidence showing that alcohol CAN be harmful to the baby. She may want to take this opportunity to refer to the newest Canadian guidelines, which state there is no safe type, amount, or time to drink alcohol during pregnancy, while breastfeeding, or when trying to become pregnant.

4. Identify options and possible consequences.

- If Michelle would follow this unprofessional doctor’s advice, her chances of delivering a baby with FASD or with other health problems due to alcohol exposure are very high.
- The safest choice for Michelle is to stay completely free from drinking any types and any amounts of alcohol during all 9 months of pregnancy. In this case her baby will not have an FASD or any other alcohol-related malformations.
- After reading the Canadian expert guidelines, Michelle will find out that abstaining from alcohol while breastfeeding can also be harmful to the baby. Michelle can be prepared for any conflicting, incorrect advice that others may give her on this topic, including unprofessional doctors.

STUDENT QUIZ

Estimated time: 10 minutes

Directions:

3. Distribute the quiz to all students in the class (paper forms if in-person teaching; through a Zoom poll if the class is online).
4. Instruct the students to work through the quiz independently or in groups in class, if time would permit. Alternatively, these questions can be assigned as a take-home quiz.

The following are the quiz questions, with the correct answer highlighted.

2. One can always identify a child with FASD by the way they look.
C. True
D. False (correct answer)
3. FASD is the leading known cause of developmental delay in Canada.
C. True (correct answer)
D. False
4. If alcohol is completely avoided during pregnancy, the child will not have FASD.
C. True (correct answer)
D. False
6. It is okay/safe for a pregnant woman to have alcoholic drinks that are less strong (wine, beer, cocktails) than hard liquor (e.g., vodka, whiskey).
C. True
D. False (correct answer)
7. When is it completely safe for a woman to drink during her pregnancy?
F. First 3 months (1st semester)
G. Mid-pregnancy (2nd semester)
H. Late pregnancy (3rd trimester)
I. All stages of pregnancy
J. It is not safe at ANY point in pregnancy (correct answer)
7. On average, what proportion of women drink alcohol during pregnancy in the general population of Canada?
E. Less than 1%
F. Between 2-3%
G. Between 15-20%
H. Approximately 10% (correct answer)
8. In the general population of Canada, what proportion of individuals are affected by FASD?
D. Less than 1% (less than 375,900 people)
E. Between 1-2% (between 375,900 and 751,800)
F. Approximately 4% (about 1.5 million people) (correct answer)

10. When a pregnant woman drinks alcohol, the alcohol can have a ____ effect on her baby, in the long-term?

- F. Behavioural
- G. Social
- H. Mental
- I. Physical
- J. All of the above (correct answer)

11. To help prevent FASD, it is necessary to:

- H. Completely avoid all alcohol (in any type/amount) when pregnant or at risk of becoming pregnant
- I. Help our pregnant friends avoid alcohol
- J. Use family planning/contraception if at risk of having an alcohol-exposed pregnancy
- K. Educate others on the risk of alcohol in pregnancy
- L. Provide support to those with addictions issues
- M. Help pregnant women with addictions seek available supports
- N. All of the above (correct answer)

AFTER the lesson plan:

FASD and PAE prevention is a key public health issue, and students in Grades 7-12 would greatly benefit from additional lessons and activities in this area.

One example of an activity to be used after the lesson plan:

- Students can get into groups of 3-4 or work independently.
- Students are to create a mock advocacy project that educates the public about FASD. Projects may take the form of a pamphlet, poster, newspaper article, radio or television public service announcement (PSA), and a letter to the editor, etc.
- The project must be persuasive, take a clear stand – “no known amount of alcohol is safe!”.
- Students are encouraged to use what they have learned to create a persuasive message that addresses common misconceptions about the negative effects of alcohol consumption during pregnancy. This may include increased availability and access to alcohol, as well conflicting messages from alcohol industry advertising.

RECOMMENDED RESOURCES FOR TEACHERS

***The following resources can provide you with more information about alcohol use and FASD that you can use in your teachings as an education practitioner:**

Alberta Partnership on Fetal Alcohol Syndrome (2002). Teaching for the Prevention of Fetal Alcohol Spectrum Disorder (FASD), Grades 1-12. A Resource for Teachers of Health and Life Skills, and Career and Life Management. <https://static.fasdoutreach.ca/www/images/print-thumbnails/teaching-prevention-fetal-alcohol-spectrum-disorder-grades-1-12/fas.pdf>

Boak, A., Elton-Marshall, T., Mann, R.E., Hamilton, H.A. (2019). Drug use among Ontario students: 1977-2019. Detailed findings from the Ontario Student Drug Use and Health Survey. https://www.camh.ca/-/media/files/pdf---osduhs/drugusereport_2019osduhs-pdf.

Canada FASD Research Network (2019, July). FASD Basic Information and Fact Sheet. <https://canfasd.ca/wp-content/uploads/2019/11/FASD-Basic-Information.pdf>

Canada FASD Research Network (2019, November 2). FASD 101: Talking to the Media About Alcohol, Pregnancy, and Fetal Alcohol Spectrum Disorder. <https://canfasd.ca/wp-content/uploads/2019/11/2-FASD-101-5.pdf>

Canada FASD Research Network (2019, November). Language Matters: Talking about Fetal Alcohol Spectrum Disorder (FASD). <https://canfasd.ca/wp-content/uploads/publications/Language-and-Images-Matter.pdf>

Canada FASD Research Network (2021, February). Common Messages: Guidelines for Talking & Writing About FASD. <https://canfasd.ca/wp-content/uploads/publications/Common-Messages-EN.pdf>

Canada Northwest FASD Partnership (2016, November). Language Guide: Promoting dignity for those impacted by FASD. <https://www.fasdcoalition.ca/wp-content/uploads/2016/10/LAEO-Language-Guide.pdf>

Flannigan, K., Unsworth, K., & Harding, K. (2018). The prevalence of Fetal Alcohol Spectrum Disorder. Canada FASD Research Network. Canada. <https://canfasd.ca/wp-content/uploads/publications/Prevalence-1-Issue-Paper-FINAL.pdf>

Flannigan K, Hardy K, Reid D, Family Advisory Committee. (2018). Strengths among individuals with FASD. <https://canfasd.ca/wp-content/uploads/2018/10/Strengths-Among-Individuals-with-FASD.pdf>

Government of Canada. Public Health Agency of Canada. (2007). What is Fetal Alcohol Spectrum Disorder? (PHAC Publication Cat. HP35-4/2007). <https://www.phac-aspc.gc.ca/hpps/dca-dea/prog-ini/fasd-etcaf/publications/pdf/factsheet1-fasd-etcaf-eng.pdf>

Harding, K., Flannigan, K. & McFarlane, A. (2019, July). Policy Action Paper: Toward a Standard Definition of Fetal Alcohol Spectrum Disorder in Canada. Canada FASD Research

Network. Canada. <https://canfasd.ca/wp-content/uploads/2019/08/Toward-a-Standard-Definition-of-FASD-Final.pdf>

Healthy Child Manitoba & Manitoba Education, Citizenship and Youth. (2009). What Educators Need to Know about FASD: Working Together to Educate Children in Manitoba with Fetal Alcohol Spectrum Disorder. Winnipeg, Manitoba, Canada.

https://www.vitalitenb.ca/sites/default/files/fasdeducators_en.pdf

Morrison, K., Harding, K. & Wolfson, L. (2019, August). Individuals with Fetal Alcohol Spectrum Disorder and Experiences of Stigma. Canada FASD Research Network. Canada.

<https://canfasd.ca/wp-content/uploads/publications/Individuals-with-FASD-and-Experiences-of-Stigma-FINAL.pdf>

Wolfson, L., Harding, K. & Poole, N. (2019, May). The Role of Partners in Fetal Alcohol Spectrum Disorder Prevention. Canada FASD Research Network. Canada.

<https://canfasd.ca/wp-content/uploads/2019/08/the-role-of-partners-in-fetal-alcohol-spectrum-disorder-prevention.pdf>

Zieff, C.D., Schwartz-Bloom, R.D. (2008). Understanding Fetal Alcohol Spectrum Disorders (FASD): A comprehensive guide for Pre-K – 8 Educators. FASD-Rise at Duke University.

https://sites.duke.edu/fasd/files/2016/04/FASD_Guide.pdf

Relevant training courses from Canada FASD Research Network available for purchase:

3. Foundations in FASD. <https://estore.canfasd.ca/foundations-in-fasd>
4. FASD for School Staff Level II: Practical Strategies for the School Environment (Online Training Course). <https://estore.canfasd.ca/fasd-for-school-staff-level-ii>

Appendix F. Pre-test survey (intervention and control)

Student Survey (11 Questions)

Use pen to circle or check off the applicable answer(s).

1. What is the gender/pronoun you identify with?

- A. Male (he/him)
- B. Female (she/her)
- C. Other
- D. Prefer not to say

2. Which grade level are you currently in? (circle one)

7 8 9 10 11 12

3. Do you think substance use in youth (under 25 years) carries the same risks as substance use in adulthood (25 and over)?

- A. Yes
- B. No
- C. It depends

4. Alcohol is a toxin, meaning that it negatively affects all bodily systems (central nervous system, gastrointestinal, reproductive, etc.)

- A. True
- B. False
- C. Don't know

5. Alcohol is a carcinogen, meaning it may cause cancer.

- A. True
- B. False
- C. Don't know

6. Alcohol is a teratogen, meaning it may destroy the cells of an unborn baby and cause defects (e.g., brain or kidney damage)

- A. True
- B. False
- C. Don't know

7. How often do you think a pregnant woman can drink alcohol without potentially harming the health of her unborn child?

- A. Daily or almost daily
- B. A few times a week
- C. Once a week
- D. 1 to 3 times a month
- E. Less than once a month
- F. Never
- G. It depends
- H. Not sure

8. At which time during pregnancy can it be considered SAFE for a woman to drink alcohol, without potentially harming the health of the unborn child?

- A. Beginning/First 3 months (first trimester)
- B. Middle/4th to 6th month (second trimester)
- C. End/Last 3 months (3rd trimester)
- D. Anytime (during the pregnancy)
- E. Never (during the pregnancy)
- F. It depends
- G. Not sure

9. Once a woman who drinks alcohol learns that she is pregnant, what would be the safest option for her during the rest of her pregnancy?

- A. Drink alcohol as she normally would
- B. Cut back on alcohol
- C. Stop drinking alcohol completely
- D. It depends
- E. Not sure

10. Have you ever heard of Fetal Alcohol Spectrum Disorder (FASD) or the negative effects of alcohol use during pregnancy?

Yes _____ No _____

If you answered yes, how did you hear of FASD? (Check off all that apply)

- A. School - what grade level? _____
- B. Television
- C. Newspaper
- D. Radio
- E. Family
- F. Friends
- G. Health care professional
- H. Other - please specify: _____

11. Which of the following is true about FASD? (Check off all that apply)

- A. FASD is only seen in babies
- B. Individuals with FASD may have a number of physical, mental, and behavioural problems related to their disability
- C. FASD is passed on from mother to child
- D. FASD is a disability that lasts a lifetime
- E. FASD only occurs in children whose mothers have alcohol addiction during pregnancy
- F. FASD in the child can be prevented if the mother stops drinking during pregnancy
- G. Exposure to alcohol through breastmilk alone cannot cause FASD

**Student Survey
Post-Test (14 questions)**

1. **What is the gender/pronoun you identify with?**
 - A. Male
 - B. Female
 - C. Other
 - D. Prefer not to say
2. **Which grade level are you currently in?**
7 8 9 10 11 12
3. **Do you think substance use in youth (under 25 years) carries the same risks as substance use in adulthood (25 and over)?**
 - A. Yes
 - B. No
 - C. It depends
4. **Alcohol is a toxin, meaning it negatively affects all bodily systems and may negatively affect all systems of the body (central nervous system, gastrointestinal, reproductive, etc.)**
 - A. True
 - B. False
 - C. Don't know
5. **Alcohol is carcinogen, meaning it may cause cancer.**
 - A. True
 - B. False
 - C. Don't know
6. **Alcohol is a teratogen, meaning it may destroy the cells of an unborn baby and cause defects (e.g., brain or kidney damage)**
 - A. True
 - B. False
7. **How often do you think a pregnant woman can drink alcohol without potentially harming the health of her unborn child?**
 - A. Daily or almost daily
 - B. A few times a week
 - C. Once a week
 - D. 1 to 3 times a month
 - E. Less than once a month

- F. Never
- G. It depends
- H. Not sure

8. At which time during pregnancy can it be considered SAFE for a woman to drink alcohol, without potentially harming the health of the unborn child?

- A. Beginning/First 3 months (first trimester)
- B. Middle/4th to 6th month (second trimester)
- C. End/Last 3 months (3rd trimester)
- D. Anytime (during the pregnancy)
- E. Never (during the pregnancy)
- F. It depends
- G. Not sure

9. Once a woman who drinks alcohol learns that she is pregnant, what would be the safest option for her during the rest of her pregnancy?

- A. Drink alcohol as she normally would
- B. Cut back on alcohol
- C. Stop drinking alcohol completely
- D. It depends
- E. Not sure

10. Which of the following is true about FASD? (Check off all that apply)

- A. FASD is only seen in babies
- B. Individuals with FASD may have a number of physical, mental, and behavioural problems related to their disability
- C. FASD is passed on from mother to child
- D. FASD is a disability that lasts a lifetime
- E. FASD only occurs in children whose mothers have alcohol addiction during pregnancy
- F. FASD in the child can be prevented if the mother stops drinking during pregnancy
- G. Exposure to alcohol through breastmilk alone cannot cause FASD, but is associated with other adverse health impacts for the infant

11. In general, how important is it to you to understand how to have and support alcohol-free and drug-free pregnancies?

- A. Not at all important
- B. Only slightly important
- C. Important
- D. Extremely important

12. In general, how important is FASD prevention to you?

- A. Not at all important
- B. Only slightly important
- C. Important

D. Extremely important

13. Female students only: In general, how important will it be to you to abstain from alcohol and other drugs during pregnancy (later in life)?

- A. Not at all important
- B. Only slightly important
- C. Important
- D. Extremely important
- E. Not applicable

14. Male students only: In general, how important will it be to you support others in having alcohol-free and drug-free pregnancies (later in life)?

- A. Not at all important
- B. Only slightly important
- C. Important
- D. Extremely important
- E. Not applicable

Student Survey
Post-Test (20 questions)

1. **What is the gender/pronoun you identify with?**
 - A. Male
 - B. Female
 - C. Other
 - D. Prefer not to say

2. **Which grade level are you currently in?**
7 8 9 10 11 12

3. **Do you think substance use in youth (under 25 years) carries the same risks as substance use in adulthood (25 and over)?**
 - A. Yes
 - B. No
 - C. It depends

4. **Alcohol is a toxin, meaning that it negatively affects all bodily systems (central nervous system, gastrointestinal, reproductive, etc.)**
 - A. True
 - B. False
 - C. Don't know

5. **Alcohol is carcinogen, meaning it may cause cancer**
 - A. True
 - B. False
 - C. Don't know

6. **Alcohol is a teratogen, meaning it may destroy the cells of an unborn baby and cause defects (e.g., brain or kidney damage)**
 - A. True
 - B. False
 - C. Don't know

7. **How often do you think a pregnant woman can drink alcohol without potentially harming the health of her unborn child?**
 - A. Daily or almost daily
 - B. A few times a week
 - C. Once a week
 - D. 1 to 3 times a month
 - E. Less than once a month
 - F. Never

- G. It depends
- H. Not sure

8. At which time during pregnancy can it be considered SAFE for a woman to drink alcohol, without potentially harming the health of the unborn child?

- A. Beginning/First 3 months (first trimester)
- B. Middle/4th to 6th month (second trimester)
- C. End/Last 3 months (3rd trimester)
- D. Anytime (during the pregnancy)
- E. Never (during the pregnancy)
- F. It depends
- G. Not sure

9. Once a woman who drinks alcohol learns that she is pregnant, what would be the safest option for her during the rest of her pregnancy?

- A. Drink alcohol as she normally would
- B. Cut back on alcohol
- C. Stop drinking alcohol completely
- D. It depends
- E. Not sure

10. Which of the following is true about FASD? (Check off all that apply)

- A. FASD is only seen in babies
- B. Individuals with FASD may have a number of physical, mental, and behavioural problems related to their disability
- C. FASD is passed on from mother to child
- D. FASD is a disability that lasts a lifetime
- E. FASD only occurs in children whose mothers have alcohol addiction during pregnancy
- F. FASD in the child can be prevented if the mother stops drinking during pregnancy
- G. Exposure to alcohol through breastmilk alone cannot cause FASD

11. After learning about alcohol use and FASD in the lesson, how do you feel that your understanding of alcohol use and FASD has changed?

- A. Significantly improved
- B. Moderately improved
- C. Slightly improved
- D. No change
- E. I have a lesser understanding than before

12. In general, do you feel like you learned useful information in this class that will be helpful to you later in life (i.e., adulthood)?

- A. Yes
- B. No
- C. Can't tell

13. Which units were you present for in class? (Check all that apply)

- A. Unit 1: Impacts of alcohol use on teen health
- B. Unit 2: Impacts of alcohol use in pregnancy and Fetal Alcohol Spectrum Disorder (FASD)
- C. Unit 3: Supporting alcohol-free and drug-free pregnancies
- D. None of the units were helpful

14. Which units were the most helpful to your learning? (Check all that apply)

- A. Unit 1: Impacts of alcohol use on teen health
- B. Unit 2: Impacts of alcohol use in pregnancy and Fetal Alcohol Spectrum Disorder (FASD)
- C. Unit 3: Supporting alcohol-free and drug-free pregnancies
- D. None of the units were helpful

15. Do you feel Unit 3 prepared you well to have and support alcohol-free pregnancies later in life?

- A. Yes
- B. No
- C. Somewhat
- D. Can't tell

16. How likely are you to use these strategies you learned, to abstain from alcohol in your youth and to support alcohol-free pregnancies now and later in life?

- A. Yes
- B. No
- C. Somewhat
- D. Can't tell

17. In general, how important is it to you to understand how to have and support alcohol-free and drug-free pregnancies?

- A. Not at all important
- B. Only slightly important
- C. Important
- D. Extremely important

18. In general, how important is FASD PREVENTION to you?

- A. Not at all important
- B. Only slightly important
- C. Important
- D. Extremely important

19. Female students only: In general, how important will it be to you to abstain from alcohol and other drugs during pregnancy (later in life)?

- A. Not at all important
- B. Only slightly important

- C. Important
- D. Extremely important
- E. Not applicable

20. Male students only: In general, how important will it be to you to support others in having alcohol-free and drug-free pregnancies (later in life)?

- A. Not at all important
- B. Only slightly important
- C. Important
- D. Extremely important
- E. Not applicable

21. Do you have any suggestions for how this FASD Prevention Education lesson plan can be improved? (optional)

TEACHER SURVEY

1. **What is the gender you identify with?**
 - A. Male
 - B. Female
 - C. Other
 - D. Prefer not to say
2. **How many years of teaching experience do you currently have?**
Specify: _____
3. **Which grade level is the class that participated in the new lesson plan?**

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4. **Which units were you personally present for in your participating class?**
 - A. Unit 1: Impacts of alcohol use on teen health
 - B. Unit 2: Impacts of alcohol use in pregnancy and Fetal Alcohol Spectrum Disorder (FASD)
 - C. Unit 3: Supporting alcohol-free and drug-free pregnancies
 - D. None of the units were helpful to students
5. **In your opinion, which units were the most helpful to your students in teaching them new, valuable information? (Check all that apply)**
 - A. Unit 1: Impacts of alcohol use on teen health
 - B. Unit 2: Impacts of alcohol use in pregnancy and Fetal Alcohol Spectrum Disorder (FASD)
 - C. Unit 3: Supporting alcohol-free and drug-free pregnancies
 - D. None of the units were helpful to students
6. **Do you feel that the information in this lesson plan has improved your general knowledge of alcohol use in pregnancy and FASD?**
 - A. Yes
 - B. No
 - C. Somewhat
7. **Did you feel prepared to facilitate class discussions as directed in the module (for example, with the Teacher Guide document)?**
 - A. Yes
 - B. No
 - C. Somewhat

- D. Not sure
- E. Not applicable
- F. If you don't feel prepared, why?

8. With the information presented in this module, do you feel prepared to teach material on alcohol use in pregnancy and FASD in the future?

- A. Yes
- B. No
- C. Somewhat
- D. Not sure
- E. Not applicable

9. Overall, are you satisfied with the design and contents of this module?

- A. Yes
- B. No
- C. Somewhat

10. In what ways, if any, can this module be improved?

11. In your opinion, do you think this module should be included in existing health curricula? Why or why not?

12. Is there any feedback from your students that you would like to share?
